

LA JOLLA RESERVATION FOREST MANAGEMENT PLAN 2025



La Jolla Indian Reservation

San Diego County, California

August 2025

Executive Summary: 2025 Forest Management Plan

The 2025 Forest Management Plan (FMP) is a comprehensive, 20-year strategy designed to guide the protection, management, and sustainable use of the La Jolla Band of Luiseño Indians' forest and woodland resources. This "living document" replaces an outdated, generic regional plan, marking a significant exercise of Tribal sovereignty by implementing a tailored approach specific to the Reservation's unique ecological, cultural, and economic needs.

A central theme of the FMP is the deep integration of cultural values. The plan formally supports traditional harvesting, acknowledges the historical use of fire for landscape management, and mandates that the Tribal Historic Preservation Officer (THPO) review all proposed activities to ensure the protection of cultural resources.

Economically, the FMP establishes an innovative, self-funded Tribal forestry enterprise. This model avoids commercial logging of healthy trees, focusing instead on the salvage of dead and dying timber. Revenue generated from these salvage operations will be reinvested to fund future forest health projects and provide valuable employment opportunities for Tribal members.

The plan takes a proactive and structured approach to addressing the Reservation's most significant threats. This includes a sophisticated, tiered wildfire management strategy that divides the land into three zones (Asset Protection, Resource Management, and Wildland) with distinct objectives. It also details a comprehensive invasive pest management plan, with a primary focus on the Goldspotted Oak Borer (GSOB), which has already necessitated the removal of over 800 trees. The GSOB strategy includes a four-part program of Prevention/Outreach, Surveying/Detection, Management, and Restoration.

A critical component of the FMP is its legal and administrative framework. The plan is a legally mandated document that fulfills federal trust responsibilities and ensures compliance with laws like the National Environmental Policy Act (NEPA) and the National Historic Preservation Act (NHPA). The plan's documentation clarifies that adopting the FMP *reduces* the Tribe's legal liability. It does so by demonstrating due diligence, creating an official "standard of care," and providing a defensible administrative record for all management decisions. Following the established processes of NEPA and NHPA is presented as a legal shield against claims of negligence or arbitrary action, especially in high-risk activities like prescribed burns, which will be guided by their own separate, detailed plans.

To enact this vision, the General Council is asked to formally approve the FMP and its associated resolutions. This includes adopting specific sub-plans, such as the Forest Product Harvesting Regulations, which establish a permit system, define free-use allowances for Tribal members (e.g., 8 cords of firewood), and set trespass penalties. Council approval will also affirm the 25 Tribal Management Goals, adopt the climate change adaptation strategy, and formally authorize this new FMP to supersede all prior plans.

APPROVAL SHEET

2025 LA JOLLA INDIAN RESERVATION FOREST MANAGEMENT PLAN

This 2025 La Jolla Forest Management Plan (FMP) has been developed and implemented with the full and active consultation and participation of the La Jolla Band of Luiseño Indians Tribe. It is supported by written Tribal objectives and forest marketing programs (25 USC § 3104). The BIA Regional Director has reviewed the final draft of the 2025 La Jolla FMP and the BIA Acting Regional Forester, certifying compliance with 25 USC § 3103(15), 25 CFR 163.11, and 53 IAM 2.

The approval of the 2025 La Jolla FMP provides for concurrent removal of the La Jolla Indian Reservation from the *Forest Management Plan for 16 Southern California Indian Reservations/Public Domain Indian Allotments*. The Parties acknowledge that the Prior FMP is hereby replaced in its entirety by this Agreement. This FMP shall be effective in its entirety, and the Prior FMPs shall be terminated upon the approval of this FMP by the Parties. Upon such approval, all provisions of the Prior FMP are hereby superseded in their entirety and replaced herein and shall have no further force or effect.

COMPILED BY LA JOLLA TRIBAL FOREST MANAGER.

THIS FMP IS A LIVING DOCUMENT AND WILL REMAIN CURRENT UNTIL THE APPROVAL OF A PLAN THAT IS RENEWED, MODIFIED, OR REWRITTEN, REQUIRING A NEW APPROVAL PAGE AND DATE. THE LA JOLLA BAND OF LUISEÑO INDIANS WILL FORMALLY REVIEW THIS FMP BEFORE August 1, 2045.

APPROVAL RECOMMENDED BY:

LA JOLLA FOREST MANAGER: _____ on _____, 2025

PRO REGIONAL FORESTER: _____ on _____, 2025

APPROVED BY:

TRIBAL CHAIRMAN, Wesley Ruise Jr.: _____

APPROVED _____, 2025.

TRIBAL RESOLUTION _____

REGIONAL DIRECTOR PACIFIC REGION, Ryan Hunter _____

APPROVED _____, 2025

TRIBAL RESOLUTION

RESOLUTION OF THE LA JOLLA BAND OF LUISEÑO INDIANS APPROVING THE INTEGRATED RESOURCE MANAGEMENT PLAN AND THE FOREST MANAGEMENT PLAN

Resolution No. [Insert Resolution Number Here]

Date: [Insert Date of Adoption]

WHEREAS, the La Jolla Band of Luiseño Indians is a federally recognized Tribal government by the United States of America, and one of the Luiseño Tribal governments in San Diego and Riverside Counties; and

WHEREAS, the La Jolla Band of the Luiseño Indians is recognized by the Federal Government of the United States of America, and its governing body is the General Council; and

WHEREAS, Article III, Powers of the General Council, of the Constitution of the La Jolla Band of Luiseño Indians authorizes the General Council to implement all ordinances, resolutions, and other enactments of the Tribe; and

WHEREAS, Article VI, Powers of the Tribal Council, of the Constitution of the La Jolla Band of Luiseño Indians authorizes the La Jolla Tribal Council to implement all ordinances, resolutions, and other enactments of the General Council; and

WHEREAS, pursuant to the Constitution of the La Jolla Band of Luiseño Indians, dated September 7, 1995, the La Jolla Tribal Council may "represent, but not commit without General Council approval, The La Jolla Band in all negotiations between The La Jolla Band and local, State and Federal governments, their agencies and officers"; and

WHEREAS, under the Constitution and By-Laws of the La Jolla Band of Luiseño Indians, the Tribal Council is charged with the duty of protecting the health, security, and general welfare of the Tribe and all Reservation residents; and

WHEREAS, the natural resources of the La Jolla Band of Luiseño Indians are essential to the health, welfare, and sovereignty of the La Jolla Band of Luiseño Indians; and

WHEREAS, the La Jolla Tribal Council desires to develop a balanced strategic plan for managing the natural and agricultural resources of the La Jolla Band of Luiseño Indians in a manner that protects natural and cultural resources while allowing for a broad range of activities; and

WHEREAS, the La Jolla Tribal Council deems the approval of an Integrated Resource Management Plan and its associated Forest Management Plan to be in the best interest of the Tribe; and

WHEREAS, the La Jolla Band of Luiseño Indians Tribal Council believes that the Integrated Resource Management Plan and Forest Management Plan align with the Tribe's values; and

WHEREAS, the La Jolla Band of Luiseño Indians Tribal Council supports the use of prescribed fire as a valuable management tool for the protection of Tribal resources;

NOW, THEREFORE, BE IT RESOLVED by the La Jolla Band of Luiseño Indians Tribal Council that it hereby approves and adopts the Integrated Resource Management Plan and the associated Forest Management Plan for the La Jolla Band of Luiseño Indians; and

BE IT FINALLY RESOLVED that the Chairperson of the La Jolla Band of Luiseño Indians and/or the Vice-Chairperson, in the absence of the Chairperson, is hereby authorized to approve and execute the La Jolla Integrated Resource Management Plan and Forest Management Plan, including all associated documents and any and all amendments thereto.

CERTIFICATION

The undersigned, as the duly elected Chairperson and Secretary of the La Jolla Band of Luiseño Indians Tribal Council, hereby certify that the foregoing Resolution was duly adopted at a meeting of the Tribal Council held on this ____ day of _____, 2025, at which a quorum was present, and was adopted by the vote recorded below.

TRIBAL COUNCIL VOTE RECORD:

_____ In Favor _____ Opposed _____ Abstaining.

Wesley Ruise Jr., Tribal Chairperson

Jack Musick, Vice-Chairman

Angela Miner, Secretary

Joseph Amago, Treasurer

John Paipa, Council Member

92 GUIDE FOR BIA REVIEW & FMP CONTENT CHECKLIST

93 This section is provided to facilitate an efficient review of this Forest Management Plan (**FMP**) by the
94 Bureau of Indian Affairs (**BIA**). The policies and procedures herein were established in accordance with
95 all applicable federal laws, regulations, and BIA policies, including the National Indian Forest
96 Resources Management Act (**NIFRMA**).

97 To demonstrate compliance and expedite the approval process, the checklist below cross-references the
98 mandatory FMP components required by 53 Indian Affairs Manual (IAM) 2 to their specific locations
99 within this document.

100 Governing Authorities

101 The La Jolla FMP was developed in accordance with the following federal laws, regulations, and BIA
102 guidance.

103 Statutes and Regulations

- 104 • **18 U.S. Code (U.S.C.) §§ 1853, 1855, and 1856:** Pertaining to the cutting or injury of trees,
105 setting timber afire, and leaving fires unattended or unextinguished.
- 106 • **25 U.S. Code (U.S.C.) § 196:** Regarding the sale or other disposition of dead timber on Indian
107 lands.
- 108 • **25 U.S.C. §§ 406-407:** Concerning the sale of timber on lands held under trust and on unallotted
109 Indian lands.
- 110 • **25 U.S.C. § 413:** Authorizing fees to cover the cost of work performed for Indian Tribes or
111 individuals.
- 112 • **25 U.S.C. § 415:** Governing the leasing of restricted Indian lands.
- 113 • **25 U.S.C. § 466:** Establishing Indian forestry units and authorizing the promulgation of rules and
114 regulations for their management.
- 115 • **25 U.S.C. Chapter 33:** National Indian Forest Resources Management Act (NIFRMA).
- 116 • **25 Code of Federal Regulations (CFR) Part 163:** General Forestry Regulations.

117 BIA Guidance

- 118 • **53 Indian Affairs Manual (IAM) Part 2:** Forestry Management Planning.
- 119 • **53 IAM Part 2-H:** Forestry Management Planning Handbook.
- 120 • **53 IAM Chapter 10:** Woodland Management.
- 121 • **303 Departmental Manual (DM) 2:** BIA Indian Trust Responsibilities, Principles for Managing
122 Indian Trust Assets.
- 123 • **586 DM 1:** Timber Management General Policies and Responsibilities.
- 124 • **611 DM 1:** Forest Pest Control Program.

125

126 FMP Content Checklist

127 The La Jolla FMP meets the minimum requirements for a **Category 4** forest as specified in 53 IAM 2.
 128 The following table identifies the location of each required content element within this FMP.
 129 Recommended and supplementary information has also been included where appropriate to support a
 130 comprehensive review.

131 Table i. FMP Content Checklist (Cross-Referenced to 53 IAM 2.1.7.B)

132 Table i. Minimum Content Standards 53 IAM 2.1.7.B.

Req.	Description
1	Approval Sheet Indicates the effective period of the FMP from the date of approval until it is renewed, modified, or rewritten, necessitating a new approval page and date.
2	Statutory Objectives - Landowner Goals and Objectives A narrative describing the forest resources under management and the La Jolla Band of Luiseño Indians' goals and objectives for these resources, including established forest management policies.
3	2.9 Forest Inventory and Analysis including comprehensive description of the forest, including total acreage, forest cover types, land classification systems, and other relevant resource data.
4, 5, 22	Maps & Charts Includes relevant and descriptive maps and charts that provide historical context and support the understanding of past management activities and forest conditions. 2.10 Map Section Error! Bookmark not defined. Map 1. Regional Location..... Error! Bookmark not defined. Map 2. Boundary and Topography Error! Bookmark not defined. Map 3. Section Map overlayed with Trust Status..... Error! Bookmark not defined. Map 4. Land Ownership Map (Tribal Trust, Allotment, Fee.... Error! Bookmark not defined. Map 5. Road System..... Error! Bookmark not defined. Map 6. Forest Use Zone..... Error! Bookmark not defined. Map 7. Forest Vegetation..... Error! Bookmark not defined. Map 8. Soil..... Error! Bookmark not defined. Map 10. Fuel Break and Pile Burn Site..... Error! Bookmark not defined. Map 11. Direct Protection Areas SD County..... Error! Bookmark not defined. Map 12. Fire Management Units Error! Bookmark not defined. Table of Figures Figure 1. GSOB Field ID Guide72 Figure 2. Integrated Resource Management Diagram83 Figure 3. Organizational Chart84 Figure 4. Natural Resources Organizational Chart.....85

Req.	Description
	Table of Tables Table 1. Government Performance and Results Act Goals.....25 Table 2 BIA Tracts Included in the La Jolla Indian Reservation.....27 Table 3. Acreage of Trust Forest Land Use Zones28 Table 4. Riparian Protection Zones.....29 Table 5. Forest Types30 Table 6. T&E Species Located Near Reservation.....31 Table 7. Reservation-Wide Conifer and Hardwood Stocking.....34 Table 8. Conifer and Hardwood Growth34 Table 9. Arson Investigation Contacts78 Table 10. Max Distance between Cross Drainages ¹ on Temporary Roads88 Table 11. Minimum fuel break width.....89 Table 12. Minimum Distance Between Understory Plants.....90 Table 13. Forestry Program Work Schedule (FY 2025-2026).....92 Table 14. Grant Funding Secured (2021 - 2024)108
6	1.4.1 Tribal Laws, Ordinances, Standards A discussion of any formally adopted Tribal and Federal policies, laws, or restrictions that have a direct impact on the implementation of this Forest Management Plan.
7	3.0 Fire & Forest Management At a minimum, a description of the strategies in place for fire protection, such as the Fire Management Plan and any existing fire protection agreements
8	4.0 Insect & Disease Outlines planned actions to proactively promote overall forest health, as well as procedures for the detection, diagnosis, and treatment of forest insect and disease problems.
9	6.0 Trespass: Protecting Our Resources Details planned actions to deter, detect, investigate, and pursue legal action against individuals or entities engaging in unauthorized resource use (trespass).
10	7.0 Post-Disturbance Rehabilitation: A Preliminary Framework Defines the purpose and procedures for assessing the need for, prescribing, and implementing emergency treatments to mitigate threats to life or property and to stabilize and prevent further degradation of natural and cultural resources following events like wildfire.
11	8.0 Forest Documentation, Monitoring, & Records Forest Documentation, Monitoring & Records Identifies the required program documentation and record-keeping procedures, along with planned actions necessary to effectively monitor the progress and outcomes of the Forest Management Plan implementation.

Req.	Description
12	<u>9.0 Resource Management Coordination</u> Describes the necessary contacts and processes for effective intra- and inter-disciplinary program implementation, as well as procedures for conflict resolution among different resource management areas.
13	<u>9.3 Staffing and Technical Support</u> Details the staffing requirements (e.g., organizational structure, staff experience and qualifications) and the program resources (e.g., equipment, funding sources) essential for the successful implementation of the FMP.
14	<u>10.0 Silvicultural Guidelines</u> Presents the specific stand treatment criteria, operational procedures, and any relevant restrictions that will guide silvicultural activities within the forest.
15	<u>12.0 Harvest Planning and Scheduling</u> Allowable Annual Cut (AAC) Defines the Allowable Annual Cut (AAC) as the maximum volume of timber that can be harvested annually, consistent with the established management goals and objectives during the specified planning period.
16	<u>12.2 Harvest Policy</u> Provides a detailed explanation of how the AAC will be applied during the plan period, including product utilization standards, operational processes, specific procedures, any applicable restrictions, and the types of forest products to be harvested (including non-timber forest
17	<u>12.4 Future Forest</u> Presents an annually updated projection of the anticipated harvest volume and the general location of planned forest product sales intended to meet the AAC targets for a specified timeframe in the future.
18	<u>Chapter 11: Forest Development Program</u> Outlines the scheduled regeneration activities and stand improvement treatments planned for the duration of this FMP, as well as the procedures for updating these plans as needed.
19	<u>13.1 Data Collection</u> Describes the specific processes, standardized procedures, and established schedule for conducting forest inventories and collecting relevant data.
20	<u>13.3 Forest History</u> <i>Not required for Category 4 forests:</i> A chronological account of significant management and natural events that have shaped the present condition of the forest.
21	<u>13.2 Harvest Records</u> A chronological record of the volumes and economic values of forest products removed from the forest throughout its management history.
23	<u>14.1 Income and Economic Analysis</u> Details the anticipated value of product royalties and any other cash revenues expected from the utilization of the forest's resources.
24	<u>14.2 Native American Economic Impact</u> Describes the expected Indian-related benefits, including employment opportunities, potential profits, personal and cultural uses of forest resources, and subsistence activities.
25	<u>14.5 Non-Native Economic Impact</u> Describes the anticipated economic benefits for non-Native individuals and entities, such as related employment and potential profits generated by forest management activities.
26	<u>14.3 Regional Economic and Social Impact</u> Regional Economic Impacts Assesses the broader regional economic impacts, including the value derived from direct, indirect, and induced employment and income multipliers associated with forest management activities.

Req.	Description
27	14.4 Economic Trends Presents an analysis of historical economic trends related to forest resources and provides projections for future economic potential in the forestry sector.
28	14.6 Social Assessment Provides documentation of the existing social conditions, relevant social processes, and prevailing trends within the community, and analyzes their relationships to the condition of natural resources and proposed forest management actions.
29	14.7 Document Archiving Specifies that the Forest Management Plan and all supporting documentation (e.g., Forest History, if applicable) will be permanently archived in the Central Office.
30	14.8 Authority and Federal Compliance Ensures that the FMP and all planned activities will be implemented in full compliance with other relevant Federal mandates, including the National Environmental Policy Act (NEPA), the Endangered Species Act (ESA), and the National Historic Preservation Act (NHPA).
2.8.D.1.	Appendix 2 – Forest Land Classification
2.8.D.2.	Acknowledgements – Plan Participation

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289 Acknowledgements

290 The La Jolla Band of Luiseño Indians firmly believes that responsible stewardship requires the consideration of
291 diverse perspectives and strong collaborative relationships. The development of this Forest Management Plan
292 (FMP) was a comprehensive and inclusive process, involving outreach and input from a broad spectrum of
293 stakeholders, including:

- 294 • The general public and community members.
- 295 • Beneficial owners (allottees) and their representatives.
- 296 • The Bureau of Indian Affairs (BIA), as the federal trustee.
- 297 • Relevant federal and state agencies; and
- 298 • Cooperating partners, including neighboring tribes, academic institutions, and non-governmental
299 organizations.

300 The La Jolla Band of Luiseño Indians extends its sincere gratitude to the following individuals, councils, and
301 partners for their invaluable support, cooperation, and contributions to this plan:

- 302 • **The Officials and Employees of the La Jolla Band of Luiseño Indians:** For their essential dedication
303 and commitment.
- 304 • **Specific Tribal Administration Staff:** We especially thank Rob Roy (Environmental Director) for his
305 comprehensive guidance and Frank Spurgeon (Air Program Manager) for his expertise.
- 306 • **Jose Contreras, Jr.:** A dedicated La Jolla Tribal member who provided invaluable assistance with
307 woodland inventory and logistical support.
- 308 • **Current Tribal Council (at time of FMP Approval):**
 - 309 o Wesley Rusie Jr., Tribal Chairperson
 - 310 o Jack Musick Sr., Vice Chairman
 - 311 o Angela Miner, Secretary
 - 312 o John Paipa, Tribal Council Member
 - 313 o Joseph Amago, Treasurer
- 314 • **Previous Tribal Council Members (involved in FMP Development):**
 - 315 o Wendy Schlater, Norma Contreras, Fred Nelson, Delia Gutierrez, Larriann Musick, and John
316 Paipa.
- 317 • **Key Tribal Administration Staff (involved in FMP Development):**
 - 318 o Rob Roy (Environmental Director), Frank Spurgeon (Air Program Manager), Wesley Ruise Jr.
319 (Fire Chief), Joeline Tamm (Natural Resource Director), and Bill Nelson (Natural Resources
320 Manager).
- 321 • **BBW & Associates (Contractors):** Registered Professional Foresters Bill Wilkinson and Kenneth
322 Baldwin served as the principal contractors, working in close collaboration with the Tribal
323 Administration.
- 324 • **Jose Contreras, Jr. (BBW Employee):** As a guide and forest technician employed by BBW, Mr.
325 Contreras made significant contributions to the plan's on-the-ground data collection.

326

Foreword



For generations, the lands of the La Jolla Indian Reservation have sustained our people, providing us with resources, spiritual connection, and a place to call home. It is our sacred duty as a sovereign nation to protect and manage these lands not only for ourselves, but for the seven generations to come.

This Forest Management Plan is more than a document; it is a declaration of our commitment to that duty. It provides our Natural Resources Department and our Tribal government with a clear, comprehensive guide for managing our precious forest

resources in a way that is sustainable, culturally sensitive, and economically responsible. This plan was developed by us, for us, and it puts the specific needs and values of the La Jolla people at the center of all decisions.

A cornerstone of this plan is the establishment of a formal wood harvesting permit system. This is a critical step forward in exercising our sovereignty. It will allow us to carefully track the health of our forests, manage tree mortality responsibly, and provide our government with the tools and ordinances needed to prevent the illegal theft of our resources. It ensures that the benefits of our forest—whether for firewood, cultural practices, or economic opportunity—are managed for the good of the entire community.

By approving this plan, we are taking a proactive step to protect our Reservation from threats like wildfire and invasive species while building a resilient future. We are formally honoring our traditional knowledge and empowering our own people to manage our lands. We present this plan to the community as a testament to our enduring stewardship and our vision for a healthy, thriving forest for all future generations of the La Jolla Band of Indians.

Executive Summary



Photo. 1. Photo from NE Corner of LJR looking to the south.

This Forest Management Plan (FMP) is a comprehensive strategy developed for the La Jolla Indian Reservation to direct the management, protection, and use of its forest and woodland resources. Created in collaboration with the La Jolla Band of Indians and the Bureau of Indian Affairs (BIA), this "living document" will guide activities for the next 20 years. It is a highly detailed and actionable plan, replacing older, regional plans with a tailored approach specific to the Reservation's unique needs.

The FMP's purpose is to ensure the long-term health of the Reservation's forestland by balancing resource protection with sustainable use. A central theme is the deep integration of cultural values. It formally supports traditional harvesting, acknowledges the historical use of fire to maintain native grasslands, and gives the Tribal Historic Preservation Officer (THPO) a critical role in reviewing all activities to protect cultural resources.

The plan takes a proactive and structured approach to addressing major threats. It establishes clear protocols for deterring and prosecuting **trespass** and for implementing **emergency rehabilitation** after events like wildfire. It acknowledges the impacts of **climate change** and outlines a sophisticated **wildfire management strategy** that divides the reservation into three zones (Asset Protection, Resource Management, and Wildland Management). Finally, it details a comprehensive **invasive pest management plan**, with a major focus on the Goldspotted Oak Borer (GSOB), which has already caused the removal of over 800 trees.

A key aspect of the FMP is its detailed economic and social framework. The economic model is explicitly **not commercial logging** of healthy trees. Instead, it focuses on creating a sustainable, self-funded Tribal forestry enterprise centered on the **salvage of dead and dying trees**. Revenue from these operations, which in 2021 provided subsidized income for seven individuals—will fund future forest health projects and provide valuable employment for Tribal members. The plan's social assessment confirms it is designed to be socially responsible, enhancing community resilience and educational opportunities while avoiding negative impacts on members who rely on the forest for their needs.

Finally, the plan operates within a strict legal and administrative structure. It is a legally mandated document fulfilling federal trust responsibilities and must comply with numerous laws like the National Environmental Policy Act (NEPA) and National Historic Preservation Act (NHPA). Recognizing its long-term significance, the FMP and all its associated records will be permanently archived by both the Tribe and the BIA.

Frequently Asked Questions:

Understanding the Forest Management Plan and Legal Liability

Approving a formal management document like the Forest Management Plan (FMP) is a significant step. It's understandable to have questions about what this means for the Tribe's responsibilities and potential legal liability. This FAQ is designed to address those common concerns.

1. Does approving this Forest Management Plan (FMP) expose the Tribe to new or increased legal liability?

This is the most important question, and the answer is nuanced: Approving the FMP doesn't necessarily create new liability but rather helps to **manage and reduce the liability that already exists**.

As a sovereign nation and landowner, the Tribe already has a responsibility to manage its lands and resources. The greatest legal risk often comes from *inaction* or from taking actions without a clear, defensible plan. The FMP serves as a powerful tool to shield the Tribe from liability by:

- **Demonstrating Due Diligence:** It proves the Tribe has a thoughtful, well-researched, and proactive strategy for managing its resources.
- **Creating a Standard of Care:** It establishes the official, approved standards for all forestry activities. Following these approved standards is a strong defense against claims of negligence.
- **Providing a Defensible Record:** The entire FMP document, along with its required compliance steps, creates a detailed administrative record showing *why* decisions were made, which is crucial in any legal challenge.

In short, it is legally riskier to have no plan than it is to have a comprehensive, approved plan.

2. What are the legal risks if we *don't* approve a formal plan?

397 The risks of inaction or operating without a current, approved FMP are significant and arguably much greater.
398 Without a plan, the Tribe could be more vulnerable to claims related to:

- 399 • **Negligence:** If a catastrophic wildfire starts on unmanaged Tribal land and damages neighboring
400 property, it is much harder to defend against a negligence claim without an approved plan demonstrating
401 proactive fuel management.
- 402 • **Resource Damage:** Uncontrolled pest infestations (like the GSOB) or degradation of watersheds could
403 lead to legal challenges.
- 404 • **Breach of Trust Responsibility:** The federal government has a trust responsibility to protect Tribal
405 resources. A failure to actively manage and protect the forest could be seen as a breach of that
406 responsibility, creating potential legal friction.
- 407 • **Inconsistent Management:** Without a guiding document, decisions can be inconsistent, making them
408 appear arbitrary and easier to challenge legally.

409 **3. What happens if an approved activity, like a prescribed burn, goes wrong and causes damage? Are we**
410 **liable?**

411 This is a valid concern. However, the FMP provides layers of protection that would not exist otherwise. The plan
412 requires that high-risk activities like prescribed burns be guided by their own detailed, professional **Prescribed**
413 **Burn Plan**. This plan would outline specific weather conditions, personnel requirements, safety protocols, and
414 contingency plans.

415 If an incident were to occur, the Tribe could demonstrate that it was not acting carelessly. Instead, it was
416 following an approved, professional plan developed in accordance with industry and federal standards. While
417 liability is never zero, this drastically reduces exposure compared to an unplanned fire escaping. Furthermore,
418 such plans often have requirements for insurance or other financial backstops.

419 **4. The plan mentions many federal laws like NEPA and the Endangered Species Act. Doesn't trying to**
420 **follow all these complex rules just create more ways for us to make a mistake and get sued?**

421 This is a common worry, but in practice, the opposite is true. Following these established legal processes is one of
422 the **strongest protections against lawsuits**.

423 Think of laws like the National Environmental Policy Act (NEPA) and the National Historic Preservation Act
424 (NHPA) as a legally tested "recipe" for decision-making. By following the recipe—consulting with experts,
425 assessing environmental impacts, considering alternatives, and consulting with the THPO—the Tribe creates a
426 robust administrative record. This record proves that decisions were thoughtful, informed, and not made
427 "arbitrarily and capriciously," which is the legal standard most challengers must meet to win a lawsuit. Ignoring
428 these processes opens the door to procedural lawsuits that are very difficult to defend.

429 **5. How does having our own specific FMP affect our Tribal sovereignty in relation to these legal issues?**

430 Approving a Tribal-specific FMP is a powerful **exercise of sovereignty**. It moves the Tribe away from being
431 managed under a generic, BIA-regional plan and puts the La Jolla Band's specific goals, values, and priorities at
432 the forefront of decision-making.

433 Legally, this strengthens the Tribe's position by ensuring that management actions are directly tied to the
434 expressed will and formal objectives of the Tribal government. It demonstrates self-governance and responsible

stewardship, which are pillars of sovereignty. It ensures that the BIA's role is to support the Tribe's vision, rather than dictating a one-size-fits-all approach.

6. What practical steps does the plan include to protect the Tribe from liability?

The FMP is filled with practical, risk-reducing measures, including:

- **Mandatory Standards:** It requires adherence to specific professional standards for things like road construction and felling trees.
- **Clear Protocols:** It establishes clear procedures for documentation, monitoring, and record-keeping, ensuring accountability.
- **Expert Consultation:** It mandates consulting with experts like foresters, entomologists, and the THPO before acting.
- **Interagency Coordination:** It requires working with federal, state, and local partners, which shares knowledge and distributes responsibility.
- **Trespass Enforcement:** It provides a clear policy for dealing with trespass, reducing the risk of unauthorized and dangerous activity on Tribal lands.

Points for General Council Review and Consideration for Approval

The Tribal Council should review the following key items within the Forest Management Plan and consider them for formal approval:

1. **Approve the 2025 Forest Management Plan (FMP):** To adopt the FMP as the official guiding document for all forest management activities on the La Jolla Indian Reservation for the next 20 years.
2. **Adopt the Tribal Resolution:** To pass the associated resolution which formally approves the Integrated Resource Management Plan and the Forest Management Plan and authorizes the Chairperson to execute all related documents.
3. **Approve the Forest Product Harvesting Regulations:** To adopt the detailed policy that establishes a formal permit system, sets free-use allowances for Tribal members (e.g., 8 cords of firewood), defines a fee schedule for paid permits, and establishes trespass penalties (triple stumpage value).
4. **Approve the Invasive Insect Management Plan:** To formally adopt the detailed strategy for combating pests, with a strong focus on the Goldspotted Oak Borer (GSOB). This includes approving the four-part program of Prevention/Outreach, Surveying/Detection, Management (including tree removal and insecticide use), and Restoration.
5. **Approve the Tiered Fire Management Strategy:** To adopt the modern strategy that divides the Reservation into three Fire Management Units (Asset Protection Unit, Resource Management Unit, Wildland Management Unit), each with specific objectives and suppression tactics. This includes supporting the development of a specific Tribal Prescribed Burn Plan.
6. **Approve the Cultural Resource Protection Directives:** To formally mandate that all forestry programs must collaborate with the Tribal Historic Preservation Officer (THPO), who is responsible for reviewing all proposed activities to avoid or mitigate impacts on cultural resources.
7. **Adopt the Climate Change Adaptation Strategy:** To endorse the plan's directives to use adaptive management, pursue landscape-scale partnerships with neighboring agencies, and prioritize forest conservation to build resilience against climate change.

8. **Confirm the 25 Tribal Management Goals:** To formally affirm that the detailed goals listed in the plan—such as Culture-Based Management, Fire Protection, and Economic Development—accurately reflect the long-term vision and priorities of the Tribe.
9. **Authorize Superseding of Prior Plan:** To officially approve the termination of the previous "Forest Management Plan for 16 Southern California Indian Reservations," replacing it entirely with this new, specific FMP.
10. **Authorize Execution of Documents:** To grant the Tribal Chairperson and/or other designated officials the authority to execute the final approval sheets and all associated documents to implement the FMP.

1.0 INTRODUCTION

The Forest Management Plan for the La Jolla Indian Reservation (LJIR) provides the direction and technical specifications for forest management practices. In addition, it addresses management policy and guides its implementation. This plan covers trust and tribally owned land. It is implemented by the La Jolla Forest Manager and the Bureau of Indian Affairs (BIA) Southern California Agency. Although this plan addresses issues surrounding resources other than timber (for example, cultural and water), it is not intended to make the La Jolla Forest Manager responsible for all resources but rather to ensure that the issues and policies are formally addressed for all forest resources in a planning document.

1.1 Purpose and Need



This Forest Management Plan (FMP) establishes the strategic direction for the stewardship of all forest and natural resources on the La Jolla Indian Reservation (LJIR). Developed by the La Jolla Band of Luiseño Indians (Tribe) as a sovereign nation, and in coordination with the Bureau of Indian Affairs (BIA) as the federal trustee, this plan provides a necessary and updated framework to guide all management activities.

The fundamental purpose of this FMP is to ensure the long-term health and resilience of the Reservation's resources by balancing cultural preservation, ecological integrity, and community well-being. Specifically, this FMP is designed to:

- Safeguard cultural resources and support traditional land uses;
- Promote the health, sustainability, and productivity of forest ecosystems;
- Generate social and economic benefits for Tribal members; and
- Fulfill all federal mandates governing forest management, including the National Indian Forest Resources Management Act (NIFRMA), 25 CFR Part 163, and the BIA Indian Affairs Manual (53 IAM).

Furthermore, this FMP is a critical prerequisite for implementing the Tribe's prescribed and cultural burning program. Federal regulations (25 CFR Part 163) mandate that the use of prescribed fire as a land management tool must be supported by a formal, approved plan that documents the specific goals and consent of the landowning community for this practice.

1.2 Plan Duration, Review, and Modification

This Forest Management Plan (FMP) will guide activities for the next 20 years from its approval date and will remain current until it is formally renewed, modified, or rewritten. A mandatory formal review, which must include an updated Inventory Analysis, is required within this 20-year period, to be completed before April 1, 2045. An earlier review or modification may be triggered by significant events, such as a new forest inventory, changes in federal law, or catastrophic events like wildfire or major insect outbreaks. Any submission to modify this FMP must include the specific sections being changed, a written rationale, a supporting Tribal Resolution, and a new approval page. If the modification impacts the Allowable Annual Cut (AAC), an updated Inventory Analysis is also required.



All FMP modifications can only be implemented following formal approval by the Bureau of Indian Affairs (BIA), in accordance with federal mandates (53 IAM 2.4, 53 IAM 2.8, and 53 IAM 8.6).

1.3 Ownership, Governance and Administration

The La Jolla Indian Reservation (LJIR) is the ancestral homeland and sovereign territory of the La Jolla Band of Luiseño Indians. Situated in the Peninsular Range Mountains of northern San Diego County, approximately 60 miles northeast of San Diego, the Reservation's land base is integral to the Tribe's cultural identity, history, and self-determination. The primary access to the Reservation is via State Highway 76.

Governance of the LJIR is led by the Tribe, with the United States Department of the Interior, through the Bureau of Indian Affairs (BIA) Southern California Agency, fulfilling its federal trust responsibility. This FMP serves the La Jolla Band's vibrant community, which includes a membership of approximately 700 individuals, with about 550 members residing on the Reservation. The total resident population of approximately 620 people lives primarily within five distinct communities that form the social and cultural heart of the Nation.

1.4 Legal Framework and Guiding Principle

1.4.1 TRIBAL LAWS, ORDINANCES, STANDARDS

Currently, the La Jolla Band of Luiseño Indians does not have specific Tribal laws or ordinances dedicated solely to forest management. Therefore, all activities described in this Forest Management Plan (FMP) will be governed by the applicable federal laws, regulations, and Bureau of Indian Affairs (BIA) standards that form the basis of the federal trust responsibility.

Key governing authorities include, but are not limited to:

- The National Indian Forest Resources Management Act (NIFRMA) (P.L. 101-630)
- The Code of Federal Regulations, Title 25, Part 163 (25 CFR Part 163)
- The BIA Indian Affairs Manual, Part 53 (53 IAM)

This FMP represents a significant exercise of Tribal self-governance. It is the Tribe's intent to use this plan as a foundation for developing its own specific forest land ordinances in the future. As encouraged by federal policy (53 IAM 2.8.C.6), the development of such ordinances will provide direct Tribal oversight and further define resource priorities, at which point they would be incorporated into this legal framework.

1.4.2 2017 NRCS COOPERATIVE FMP

Pursuant to a 2019 Memorandum of Understanding between the BIA and the Natural Resources Conservation Service (NRCS), the 2017 NRCS Cooperative FMP developed for the La Jolla Band is hereby incorporated by reference into this main Forest Management Plan (see Appendix 8). The 2017 NRCS FMP serves primarily as a flexible, qualifying document that establishes the Tribe's eligibility for conservation funding and grant programs, including those offered through the Farm Bill, CAL FIRE, and the U.S. Forest Service. This document is a tool that belongs solely to the Tribe; its specific conservation practices and standards are not mandatory for all activities but will be followed only when the Tribe chooses to seek funding from a program that requires adherence to its guidelines.

1.5 Statutory Objectives

This Forest Management Plan (FMP) is structured to address the following five mandatory federal objectives for resource management planning:

1. **Scope of Management:** This FMP applies to all forest and woodland areas within the exterior boundaries of the La Jolla Indian Reservation, as delineated in maps contained within this plan.
2. **Overarching Management Objective:** The primary management objective is to protect and enhance the health, vigor, and resilience of the forest. This will be pursued in balance with strengthening cultural heritage, improving quality of life, and protecting all natural resources, as detailed in the Tribal Goals that follow this section.
3. **Identification of Reserved or Restricted Lands:** Certain areas with significant ecological, cultural, or historical value may be designated as reserved or restricted from specific management activities. The Tribal Historic Preservation Committee (THPC), through members appointed by the Tribal Council, is responsible for identifying these lands during planning processes or in response to emergency events.
4. **Regulation of Management Activities:** Management activities within designated sensitive areas will be regulated based on site-specific restrictions. Mitigation measures for potential impacts will be developed through the National Environmental Policy Act (NEPA) process. During emergencies such as wildfire, the THPC will guide restrictions on the use of heavy equipment or fire retardant in culturally sensitive areas.
5. **Decision-Making Process:** The Tribal Council is the governing authority for management decisions. To initiate a project, it must be consistent with the objectives of this FMP and receive Tribal Council approval. The subsequent planning and approval process includes a public comment period, as required by NEPA, to ensure alignment with the community's vision.

1.6 Tribal Management Goals and Objectives

The overarching management goals for the natural resources of the La Jolla Band of Luiseño Indians are rooted in the guidance provided by Tribal Council directives, the insights of participating Tribal members, and formal Tribal resolutions. These goals reflect a holistic approach to land stewardship that

integrates cultural values, environmental protection, and sustainable resource management for the benefit of current and future generations. All goals and objectives will be pursued using the best available science and research-informed adaptive management practices. The Tribe's vision is organized into four interconnected strategic pillars:

PILLAR 1: CULTURE AND HERITAGE – HONORING ANCESTRAL CONNECTIONS TO THE LAND

Goal: To manage all Reservation lands in a manner that actively protects, promotes, and perpetuates the cultural traditions, values, and sovereign rights of the La Jolla Band of Luiseño Indians.

Objectives:

- **Integrate Cultural Values:** Ensure that all resource management planning is centered on Luiseño cultural values, including the revitalization of cultural burning, preservation of the Luiseño language, and support for ceremonies and traditional land uses.
- **Protect Cultural Resources:** Diligently protect and enhance traditional cultural resources, including sacred sites, cemeteries, gathering areas for traditional plants and materials, and ceremonial grounds.
- **Support the THPO:** Actively support the Tribal Historic Preservation Officer (THPO) in the protection, promotion, and preservation of the rich array of cultural and archaeological resources on the Reservation.
- **Establish Ecological and Cultural Reserves:** Preserve ecologically significant areas as reserves that recognize inherent wilderness values and promote indigenous land management techniques, including traditional hunting, gathering, and cultural burning.

PILLAR 2: ECOSYSTEM HEALTH AND RESILIENCE – SAFEGUARDING THE NATURAL WORLD

Goal: To protect and enhance the environment of the La Jolla Indian Reservation, with a focus on fostering healthy, resilient ecosystems that can adapt to changing conditions.

Objectives:

- **Enhance Forest Health:** Implement proactive management activities that benefit the diverse natural resources of the Reservation, including forests, woodlands, and grasslands.
- **Promote Biodiversity:** Strengthen the biodiversity of native plants, animals, and microorganisms across the Reservation. Provide a secure refuge and suitable habitat for native fauna and the flora upon which they depend.
- **Restore Oak Woodlands:** Actively re-establish healthy oak tree populations in stands impacted by drought, insects, or fire.
- **Manage Invasive Species:** Aggressively reduce the negative impacts of invasive plant species and forest pests (such as GSOB and PSHB) on native ecosystems.

- **Protect Water and Soil Resources:** Restore and protect vital hydrological systems and enhance soil health by implementing practices that reduce erosion, promote slope stability, and improve overall watershed conditions, especially post-fire.
- **Build Climate Change Resilience:** Increase carbon sequestration within the Tribe's forests to enhance their capacity for carbon storage and build resilience to the anticipated impacts of climate change.

PILLAR 3: SUSTAINABLE OPERATIONS AND PROTECTION – STEWARDING AND SECURING TRIBAL ASSETS

Goal: To implement effective, on-the-ground management and protection strategies that safeguard the community, property, and natural resources from threats.

Objectives:

- **Implement Proactive Fire Protection:** Protect the community and resources from conflagrations by developing comprehensive strategies, including creating a Prescription Burn Plan, establishing clear burn permit protocols for members, facilitating cultural burning, and planning for post-fire recovery (BAER).
- **Prevent and Manage Trespass:** Protect all Reservation lands from unauthorized trespass, illegal activities, resource theft, and trespass-related fires through regular boundary inspection and enforcement.
- **Maintain Sustainable Roads:** Effectively maintain, engineer, and reconstruct native surface roads to minimize erosion and ensure sustainable access by implementing best management practices for drainage. Restrict off-road vehicle activity in sensitive areas.
- **Develop Grazing Protocols:** Establish clear guidelines to allow for responsible and sustainable grazing practices on designated lands while protecting ecological and cultural resources.

PILLAR 4: COMMUNITY AND ECONOMIC PROSPERITY – NOURISHING THE TRIBE'S FUTURE

Goal: To manage Tribal lands and resources in a way that supports the long-term social well-being and cultivates sustainable economic opportunities for the La Jolla Band and its members.

Objectives:

- **Foster Resource-Based Economic Development:** Promote economic opportunities directly linked to the sustainable utilization of the Reservation's natural resources, ensuring all activities protect resources and enhance cultural heritage.
- **Guide Sustainable Land Use:** Promote efficient land use planning that guides development, improves groundwater infiltration, and minimizes negative environmental impacts.
- **Support Tribal Housing:** Provide for adequate, culturally appropriate, and environmentally sound housing for all Band members, ensuring housing is integrated with resource management planning.

- **Manage Sustainable Recreation:** Provide responsible recreation opportunities for Tribal members and the public that are managed to minimize environmental impact and respect cultural sensitivities.

1.7 Government Performance and Results Act (GRPA) Goals

To align with federal trust responsibilities and performance standards, this Forest Management Plan (FMP) incorporates specific, measurable targets established under the Government Performance and Results Act (GRPA). These targets connect the FMP's on-the-ground activities to the BIA's national performance goals for managing Indian trust assets.

While the Tribal Management Goals (Section 1.5) represent the overarching vision for the Reservation, the following GRPA targets quantify key annual outputs for timber harvesting, forest development, and other resource-related activities.

Table 1. Government Performance and Results Act Goals

Table 1.A: Annual Timber Harvest Targets (GRPA)

Timber Type	Unit	Annual Allowable Cut (AAC)
Conifer	Cubic Feet	510
Hardwoods	Cords	0
<i>Note: Timber types are based on the California Wildlife Habitat Relationship System (CWHR): MHC = Montane Hardwood-Conifer; VRI = Valley Foothill Riparian.</i>		

Table 1.B: Forest Development Targets (GRPA)

Activity	Current Backlog (Acres)	Annual Target
Forest Stand Improvement	210	25% of Backlog & Accruals
Reforestation	225	25% of Backlog & Accruals
Afforestation	0	0% of Backlog

Table 1.C: Related Resource Targets (GRPA)

Resource Area	Activity/Target	Unit/Value
Agriculture	Lease/Permit Compliance	0 Leases/Permits
	Resource Utilization	0 Acres
Grazing	Fence Improvement	0 Miles (0% of Backlog + Maintenance.)
Common Minerals	Mineral Type	Granite
	Extraction Goal (15-yr period)	1 Ton

Table 1.D: Tribal Workforce Development Targets (GRPA)

Program/Project	# of Workers	Employment Type	Project Duration
Tribal Natural & Agricultural Work Crew	15	Forest Health, Fuels Reduction, Biomass Processing	48 Months

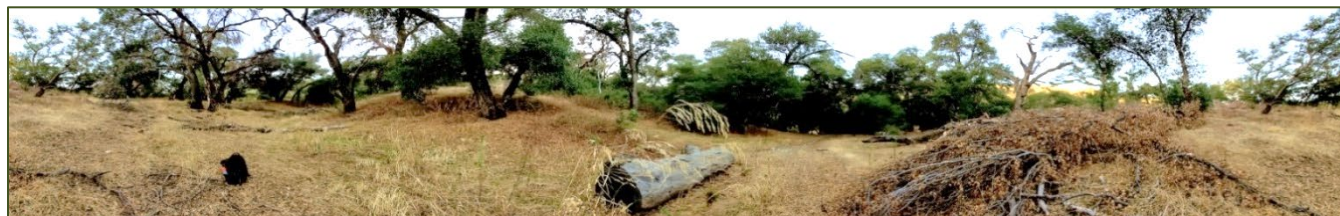


Photo. 2 Area 8 of Campground showing excessive oak tree mortality

CHAPTER 2: FOREST DESCRIPTION AND INVENTORY

This chapter provides a comprehensive overview of the La Jolla Indian Reservation's forest resources. It details the physical, cultural, and administrative context of the planning area, describes the current condition of the forest based on inventory data, and outlines the Bureau of Indian Affairs' (BIA) official land classification.

Map Summary This chapter is supported by a series of geographic information system (GIS) maps, which are compiled in **Section 2.10** at the end of this chapter. These maps offer a detailed visual reference for the key physical, administrative, and ecological features of the planning area. The map series includes foundational data such as the Reservation's regional location, legal boundaries, and topography. It also details the land use framework, including ownership patterns, the road system, and designated Forest Land Use Zones. Finally, the natural resources are depicted through maps of vegetation types, soil classifications, and water resources. Readers are encouraged to refer to this map series for a comprehensive spatial understanding of the information presented.

2.1 BIA Forest Land Classification



In accordance with federal regulations (25 CFR Part 163 and 53 IAM), the forestlands of the La Jolla Indian Reservation are classified by the Bureau of Indian Affairs (BIA) under **Category 4: Minimal Forest Lands**. This category is defined as "an identifiable forest land or woodland of any size determined by the Regional Director to be of minimal commercial value."

Consistent with this classification, all Tribal trust forestlands on the Reservation are also categorized as **Non-Productive** due to their limited potential for commercial timber output. It is critical to note that these BIA classifications are based solely on commercial value and do not reflect the fundamental cultural, spiritual, and environmental significance of these forests to the La Jolla Band of Luiseño Indians. The Tribe places immense, non-commercial value on its woodlands for reasons of tradition, sustenance, and ecological health.

Under the BIA framework, all trust forestlands are considered **Accessible**. The La Jolla Tribe has not formally designated any forest areas as **Reserved**, meaning they are not statutorily withheld from Tribal member use or development. However, the rugged terrain across much of the Reservation creates significant natural limitations on access, which influences the practical use of these resources regardless of their formal classification.

2.2 Description of the Planning Area

Geographic Setting: The La Jolla Indian Reservation (LJIR) is situated in the rugged Peninsular Range Mountains of northern San Diego County, California. The reservation is geographically bisected by State Highway 76 and is located approximately 12 miles southeast of the community of Pala. The topography is diverse and mountainous, with elevations ranging from 880 feet where the San Luis Rey River exits the property to a high of 5,140 feet in the northeastern section.

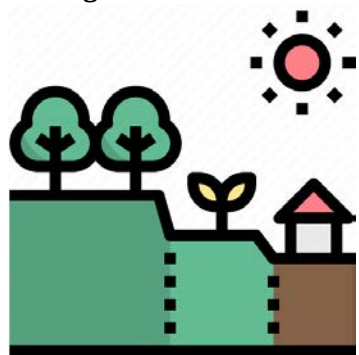
Legal and Administrative Description: The Reservation's legal boundaries encompass portions of Townships 10 and 11 South, Range 1 East (SBBM), and the Special Survey Area of Cuca or El Potrero. For administrative purposes, the BIA divides the Reservation into 81 distinct tracts, which are used throughout this FMP to identify project locations.

Table 2 BIA Tracts Included in the La Jolla Indian Reservation

Bureau of Indian Affairs La Jolla Indian Reservation Tract IDs								
576	576 20	576 33	576 47	576 59	576 68	576 T1002	576 T1001	576 19D
576 1	576 21A	576 35	576 48	576 61A	576 69	576 T1003	576 67B	576 45
576 10	576 21B	576 36	576 5	576 61B	576 70	576 T1004	576 57	576 31
576 11	576 21C	576 37	576 50	576 61C	576 71	576 T1005	576 46	576 M28
576 12	576 22	576 38	576 51	576 61D	576 72	576 T1006	576 32	576 66
576 14	576 24	576 39	576 53	576 61E	576 73	576 T52	576 2	576 5504
576 15	576 26	576 4	576 5329	576 61F	576 75	576 T5408	576 T1000	576 44
576 16	576 28	576 41	576 54	576 62	576 76	576 T6	576 67A	576 30
576 9A	576 29	576 43	576 55	576 63	576 77	576 T9	576 56	576 19C

2.3 Land Tenure, Use, and Access

Acreage and Land Tenure: The LJIR encompasses 8,078 acres held in trust. A 2016 field assessment updated the forested acreage of Tribal Trust land to 2,637 acres. An additional 333 acres are held as individual Indian allotments, bringing the total trust forestland to 2,970 acres. The 2,155-acre Cuca Ranch is a fee-simple property entirely surrounded by the Reservation but is not part of its internal land tenure. The spatial distribution of Tribal Trust, allotment, and private (fee) parcels is shown in Figure 4.



726

Current Land Uses: Land use across the LJIR is diverse, including residential communities, Tribal economic enterprises (campground, zip line, store, etc.), traditional hunting and gathering, cultural ceremonies, watershed protection zones, and Wildland Urban Interface (WUI) fuel breaks.

Boundaries and Access: While most of the Reservation boundary is marked, the southwest corner remains unsurveyed and resolving this is a Tribal priority. Access is primarily provided by State Route 76 and South Grade Road (County Road S6). The road network includes 15.3 miles of state, private, and local roads, though large areas of the Reservation lack vehicular access. Maintenance of native surface roads is required to prevent erosion.

- **Management Direction - Roads:** Road projects will protect cultural and environmental resources, and use of native surface roads will be restricted during wet conditions to prevent adverse impacts.

2.4 Forest Land Use Zoning

To effectively manage its forestlands, the Tribe has established three primary forest use zones: **Residential Forest (RF)**, **General Forest/Woodland (GFW)**, and **Riparian Protection Zone (RPZ)**.

- I. The **RF Zone** includes forested areas with at least 10% tree canopy that accommodate residential development.
- II. The **GFW Zone** This zone encompasses forest and woodland areas intended to remain primarily in an undeveloped and wild condition.
 - a. **Primary Management Objectives:** The overall management of the General Forest/Woodland zone is for watershed protection, wildlife habitat conservation, and traditional Tribal member uses, including recreation.
 - b. **Permitted Activities:** While primarily wild, this zone allows for specific, low-impact Tribal facilities, such as water tanks and managed grazing.
 - c. **Sustainable Development:** Sustainable Tribal Enterprise development, such as that currently underway within the campground area, may be permitted. Such projects must be designed to reduce overall forest impacts by streamlining visitor traffic and providing economic benefits that directly enhance forest management activities.
 - d. **Conservation Principle:** All projects within this zone must be planned and implemented to ensure there is no net loss of total forest acreage.
- III. The **RPZ** encompasses buffer areas along Class I, II, and III watercourses to protect water quality and aquatic habitat. Development within the RPZ is restricted, with buffer widths of 100, 75, and 50 feet, respectively.

Management Direction - Zoning: All management prescriptions detailed in this FMP are tailored to these designated Forest Use Zones.

Table 3. Acreage of Trust Forest Land Use Zones

Forest Land Use Zone	Acres of Tribal Trust Forestland	Acres of Allotment Forestland	Total Trust Acres
RF - Residential Forest	210	88	298
VRI - Riparian Protection Zone	357	33	390

GFW - General Forest	1,737	214	1,951
Total	2,304	333	2,645

To guide management activities and determine appropriate protection measures, such as riparian buffers, watercourses on the Reservation are classified according to the California Forest Practice Rules. The four classes are defined in Table 11.

Table 4. Riparian Protection Zones

Riparian Protection Zones on La Jolla Indian Reservation Forestlands			
Stream Class	Definition	Width (both sides of stream)	Activity Allowed
Class I	Domestic Supplies Fish Always or Seasonally Present	100 feet	- No domestic development - Development tied to water infrastructure and covered by environmental documentation - Recreational development as approved by Tribal Council - No new road construction unless covered by environmental documentation
Class II	Water Generally Present Habitat for Non-Fish Aquatic Species	75 feet	- No new domestic development - Development tied to water infrastructure and covered by environmental documentation
Class III	No Aquatic Life Present Seasonal Flows Capable of Transporting Sediment	50 feet	Tribally approved domestic development, recreational development; road reconstruction and improvement

2.5 Forest Vegetation Types

The Reservation's 2,637 acres of trust forestland are classified into three primary California Wildlife Habitat Relationship (CWHR) vegetation types (See Map 2.10.5 Forest Vegetation):

- Coast Live Oak Woodland (COW):** The most extensive type (1,942 acres), dominated by the fire-resistant coast live oak (*Quercus agrifolia*). This classification also includes 125 acres of the rare Engelmann Oak (*Quercus engelmannii*) for management purposes.
- Valley Riparian Woodland (VRI):** The second largest type (317 acres), found along watercourses. These productive ecosystems are dominated by deciduous, broadleaf hardwoods like cottonwood, sycamore, and white alder, and provide critical habitat for numerous wildlife species.
- Montane Hardwood-Conifer Forest (MHC):** The smallest type (253 acres), characterized by a mix of conifers like big cone Douglas-fir and



777 hardwoods such as live oaks. Much of this area was impacted by the 2007 Poomacha fire, but shows signs
778 of recovery.

779 **Table 5. Forest Types**

Forest Vegetation Types on La Jolla Indian Reservation Managed Under BIA Trust Responsibility (fee land excluded)			
Vegetation Type	Tribal Trust Acres	Allotment Trust Acres	Total Trust Acres
COW	1,663	279	1,942
ENG	77	48	125
VRI	311	6	317
MHC	253	0	253
Total Forest Vegetation	2,304	333	2,637
Non-Forest (shrub, grass, developed, etc.)	5,954	231	6,115
Grand Total (Forest and non- Forest)	8,258	564	8,822

780 2.6 Geology, Soils, and Water Resources

781 **Geology and Soils:** The bedrock of the LJIR is primarily fractured and
782 decomposed granite, a valuable Tribal resource. Soils are derived from this granitic
783 parent material, with specific types and locations mapped using the NRCS
784 SSURGO database (See Map 2.10.8 Soils).

785 **Water Resources:** Effective watershed management is paramount to forest health.
786 The Reservation's water resources are characterized by:



- 787 • **Groundwater:** A highly fractured granitic aquifer allows for rapid precipitation recharge, feeding the
788 springs and wells that supply the Tribe's three water systems.
- 789 • **Surface Water:** Most creeks are intermittent, with flow patterns dependent on seasonal rainfall and
790 snowmelt. All watercourses on the Reservation ultimately drain into the **San Luis Rey River**, a Class I
791 stream that flows westward through the property. The Escondido Canal, a significant irrigation channel,
792 diverts water from the river near the Reservation.
- 793 • **Rainfall:** The regional average annual rainfall is approximately 26.7 inches but is highly variable,
794 underscoring the area's susceptibility to drought.

2.7 Wildlife, Plants, and Cultural Resources



Threatened and Endangered Species: In compliance with the Endangered Species Act (ESA), environmental analyses for all projects must assess potential impacts to the nine federally listed, proposed, or candidate species documented within six miles of the LJIR. Based on habitat suitability, the **Coastal California Gnatcatcher**, **Least Bell's Vireo**, and **Southwestern Willow Flycatcher** are considered "likely to be found" on the Reservation and require special consideration.



Photograph 1. Coastal California Gnatcatcher

Cultural Resources: The lands of the La Jolla Indian Reservation are rich in cultural resources, which are the tangible and intangible heritage of the **Payómkawichum** (the People of the West). The **Tribal Historic Preservation Office (THPO)** is the lead entity for protecting these resources.

- **Management Direction - Cultural Resources:** All forest management activities will be conducted in close consultation with the THPO to identify, evaluate, and protect all cultural resources. The primary directive is to **avoid impacting cultural sites** whenever possible. The THPO maintains a confidential inventory of cultural sites and is responsible for reviewing all proposed forestry projects to mitigate any potential concerns.

Table 6. T&E Species Located Near Reservation

Federally Threatened or Endangered Species within 6 Miles of the La Jolla Indian Reservation	
Species Scientific Name (Common Name)	Status
Stephens' Kangaroo Rat (<i>Dipodomys stephensi</i>) No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/3495	Endangered
Coastal California Gnatcatcher (<i>Polioptila californica californica</i>) Location is outside the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/8178	Threatened
Least Bell's Vireo (<i>Vireo bellii pusillus</i>) Location is outside the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/5945	Endangered
Southwestern Willow Flycatcher (<i>Empidonax traillii extimus</i>) Location is outside the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/6749	Endangered
Arroyo (=Arroyo Southwestern) Toad <i>Anaxyrus californicus</i> Location is outside the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/3762	Endangered

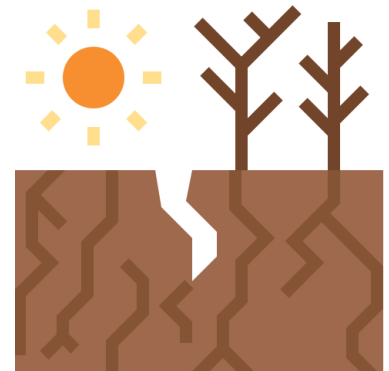
Federally Threatened or Endangered Species within 6 Miles of the La Jolla Indian Reservation	
Species Scientific Name (Common Name)	Status
Laguna Mountains Skipper (<i>Pyrgus ruralis lagunae</i>) Location is outside the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/6237	Endangered
Quino Checkerspot Butterfly (<i>Euphydryas editha quino</i>) Location is outside the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/5900	Endangered
Nevin's Barberry (<i>Berberis nevinii</i>) Location is outside the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/8025	Endangered
San Bernardino Bluegrass (<i>Poa atropurpurea</i>) Location is outside the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/4641	Endangered

2.8 Climate Change Considerations

Climate change will profoundly influence all aspects of forest management on the LJIR. Regional climate models project significant vegetation shifts, including an expansion of grasslands and an upslope shift of forests, driven by a potential 4-6°F increase in average air temperatures over the next century. This is expected to lengthen the fire season, increase wildfire intensity, and alter water availability.

Management Direction - Climate Change:

- Adaptive Management:** The Tribe will support adaptive management by integrating observation, monitoring, and the use of climate change decision-support tools.
- Landscape-Scale Partnerships:** Forest managers will cultivate partnerships with neighboring agencies to address climate impacts at a landscape scale.
- Forest Conservation:** The Tribe will prioritize minimizing the conversion of forest land to other uses to maintain carbon storage and enhance ecosystem resilience.



2.9 Forest Inventory and Analysis

2.9.1 INVENTORY METHODOLOGY

A forest inventory was conducted by BBW & Associates from January 9-12, 2016, to assess the condition of 2,304 acres of Tribal Trust forestland. The methodology, which aligns with BIA-approved statistical standards (53 IAM 8.5(A)), involved establishing 25 randomly located, nested circular plots.

To characterize the existing forest structure, a 1/10-acre plot was used to measure all trees 6 inches Diameter at Breast Height (DBH) and greater. Data on total height, crown ratio, competitive position, and tree damage were recorded. Within this larger plot, a nested 1/100-acre plot was used to assess regeneration, tallying seedlings, saplings, and poles under 6 inches DBH.



2.9.2 DATA ANALYSIS AND GROWTH MODELING

The raw plot data was processed using the USDA Forest Service's **Forest Vegetation Simulator (FVS)** program to project future growth and yield. The Inland California Southern Oregon Cascades variant of FVS was chosen as it is the only California-based model that recognizes the full range of tree species present on the Reservation, including coast live oak, sycamore, and California black oak.

To estimate site productivity, **Site Index** values (base age 50 years) were assigned to each vegetation type based on regional data: 40 feet for Coast Live Oak (COW), 50 feet for Montane Hardwood-Conifer (MHC), and 60 feet for Valley Foothill Riparian (VRI). These values were used within FVS to project growth and mortality rates.

For reporting purposes, conifer volume is measured in thousands of board feet (MBF), while hardwood volume is measured in thousands of cubic feet (MCF), which can be converted to cords for firewood planning (80 cubic feet per cord).

2.9.3 KEY FINDINGS

The inventory analysis provides a Reservation-wide summary of current forest stocking and estimated growth. The most critical finding from the FVS modeling is a projected **negative annual growth rate for hardwoods** within the extensive Coast Live Oak (COW) vegetation type. This indicates that the volume lost to rot, defect, and mortality currently exceeds new growth.

A significant contributing factor to this decline is the **Goldspotted Oak Borer (GSOB)**. While the 2016 inventory noted only minor GSOB presence, more recent observations confirm increasing oak mortality across the Reservation due to the infestation. This net loss of hardwood volume is a crucial factor that directly impacts the calculation of sustainable harvest levels described later in this plan.

862 The comprehensive output tables from the FVS program, which detail stocking, growth, and mortality by species,
863 are archived and maintained by the Tribal Natural Resources Department.

864 Table 7. Reservation-Wide Conifer and Hardwood Stocking

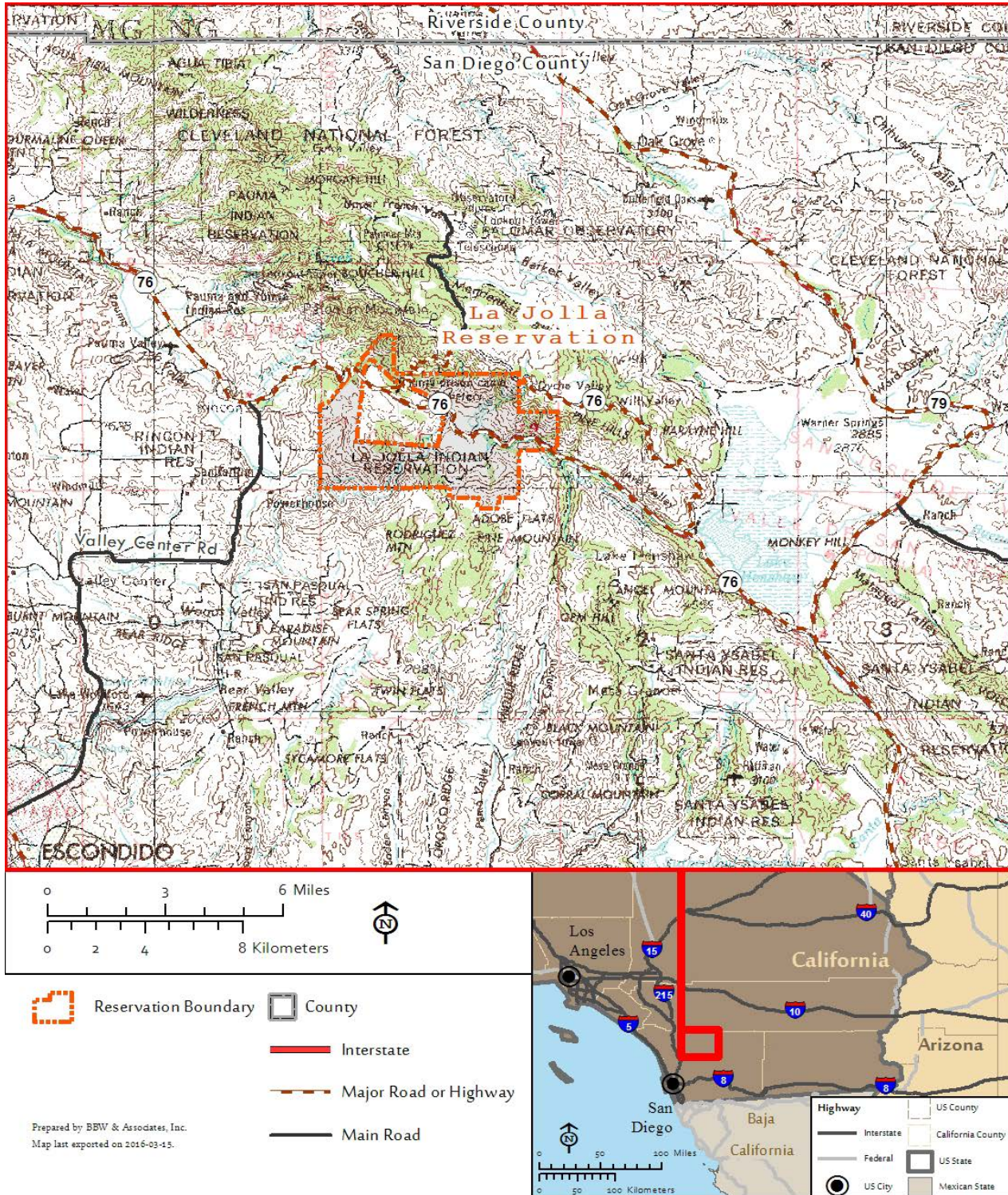
Strata	Acres	Plots	Conifer MBF	Hardwood MCF	Hardwood Cords
COW	2,067	11	21	3,995	49,438
VRI	317	5	0	3,209	40,107
MHC	253	9	4,650	272	3,410
Total	2,637	25	4,671	7,476	92,955

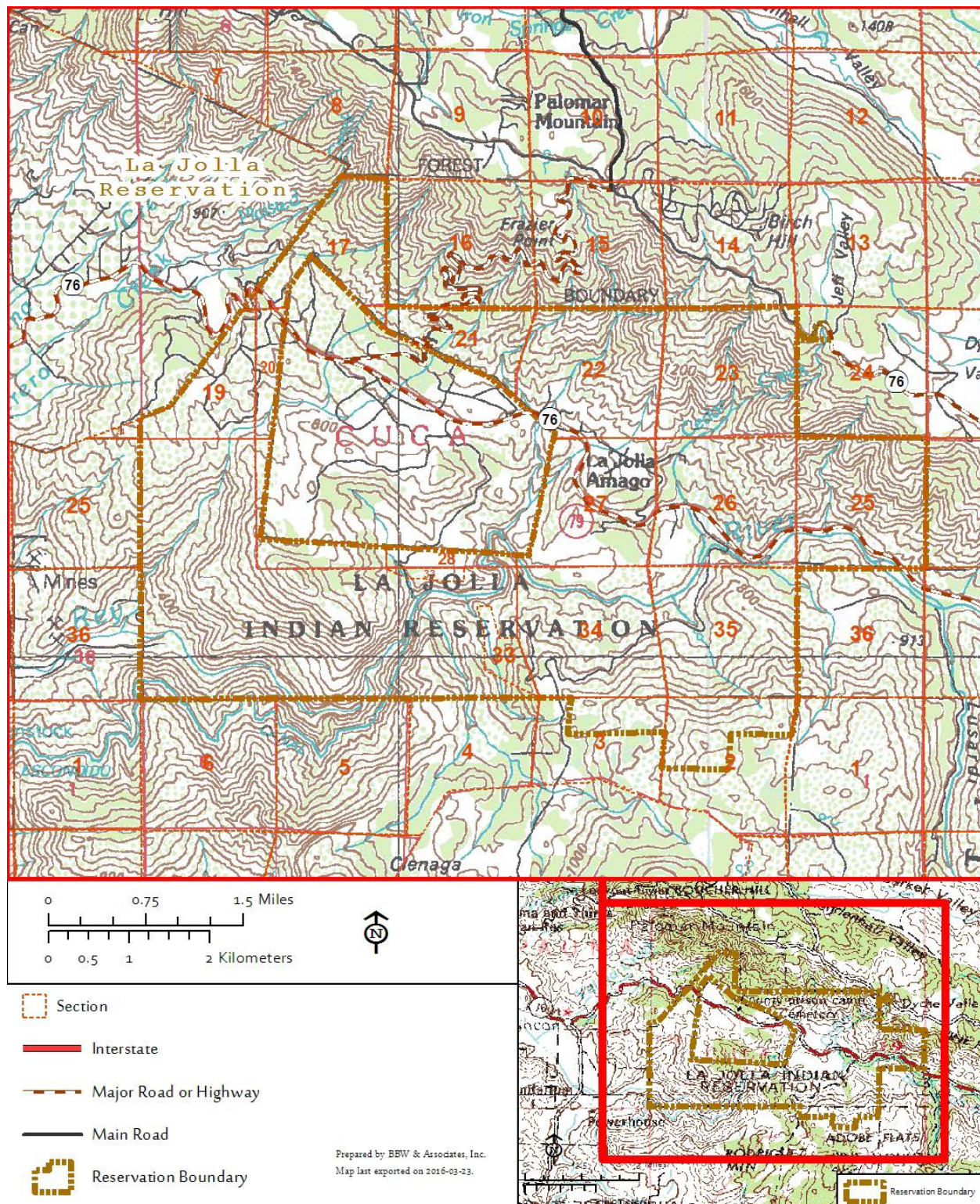
865 *NOTE: In this table and in the growth and harvest analysis below, the COW vegetation type also
866 includes the 149 acres of the Engelmann Oak vegetation type (ENG). No distinct management
867 practices are proposed for ENG, so the two types are combined in this table and in descriptions of the
868 suggested management practices.

869 Table 8. Conifer and Hardwood Growth

Strata	Acres	Plots	Conifer MBF	Hardwood MCF	Hardwood Cords
COW	2,067	11	1.7	-9.4	-118
VRI	317	5	0	3.7	46
MHC	253	9	26.8	1.4	18
Total	2,637	25	28.5	-4.3	40

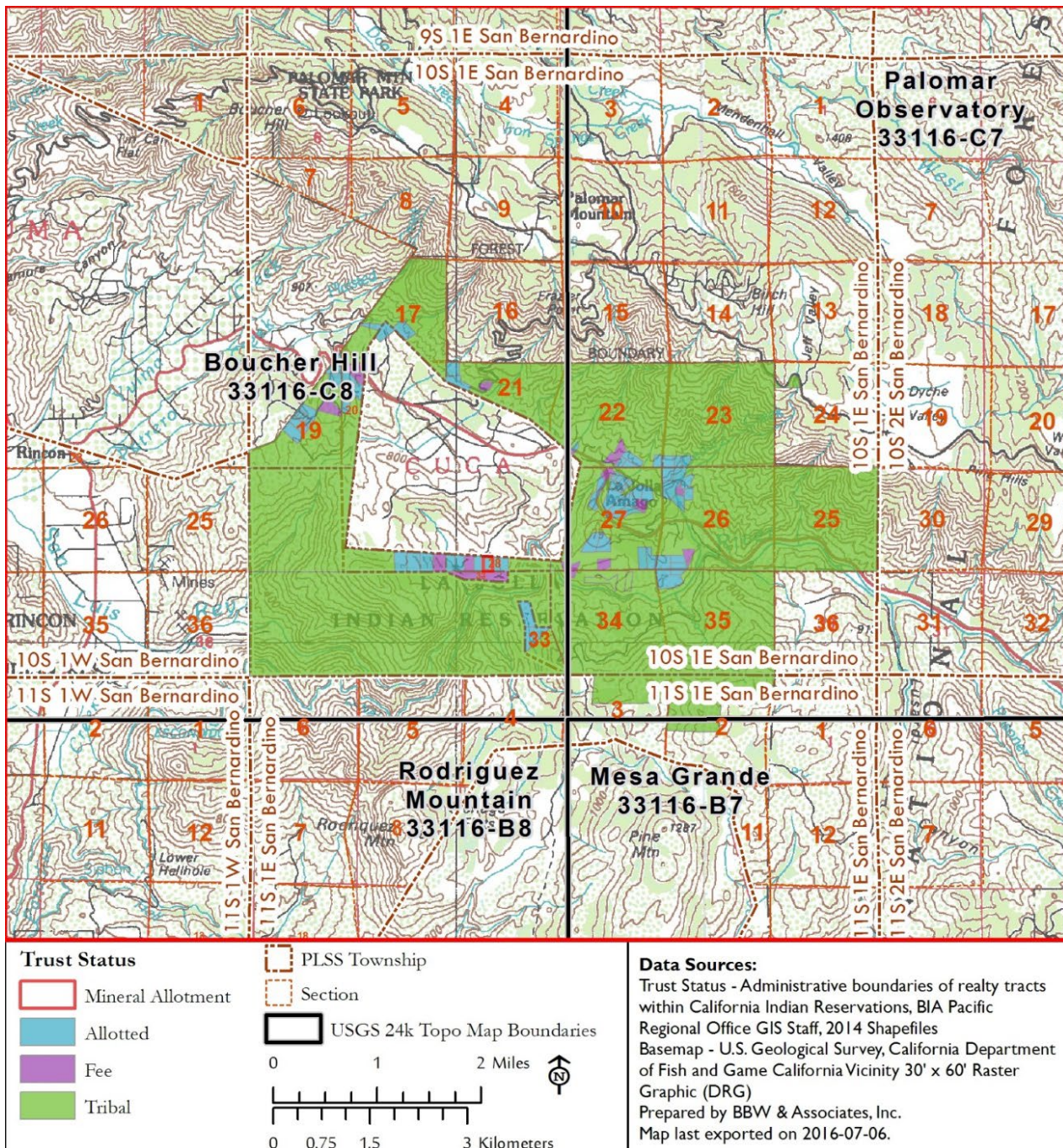
2.10 Map Section



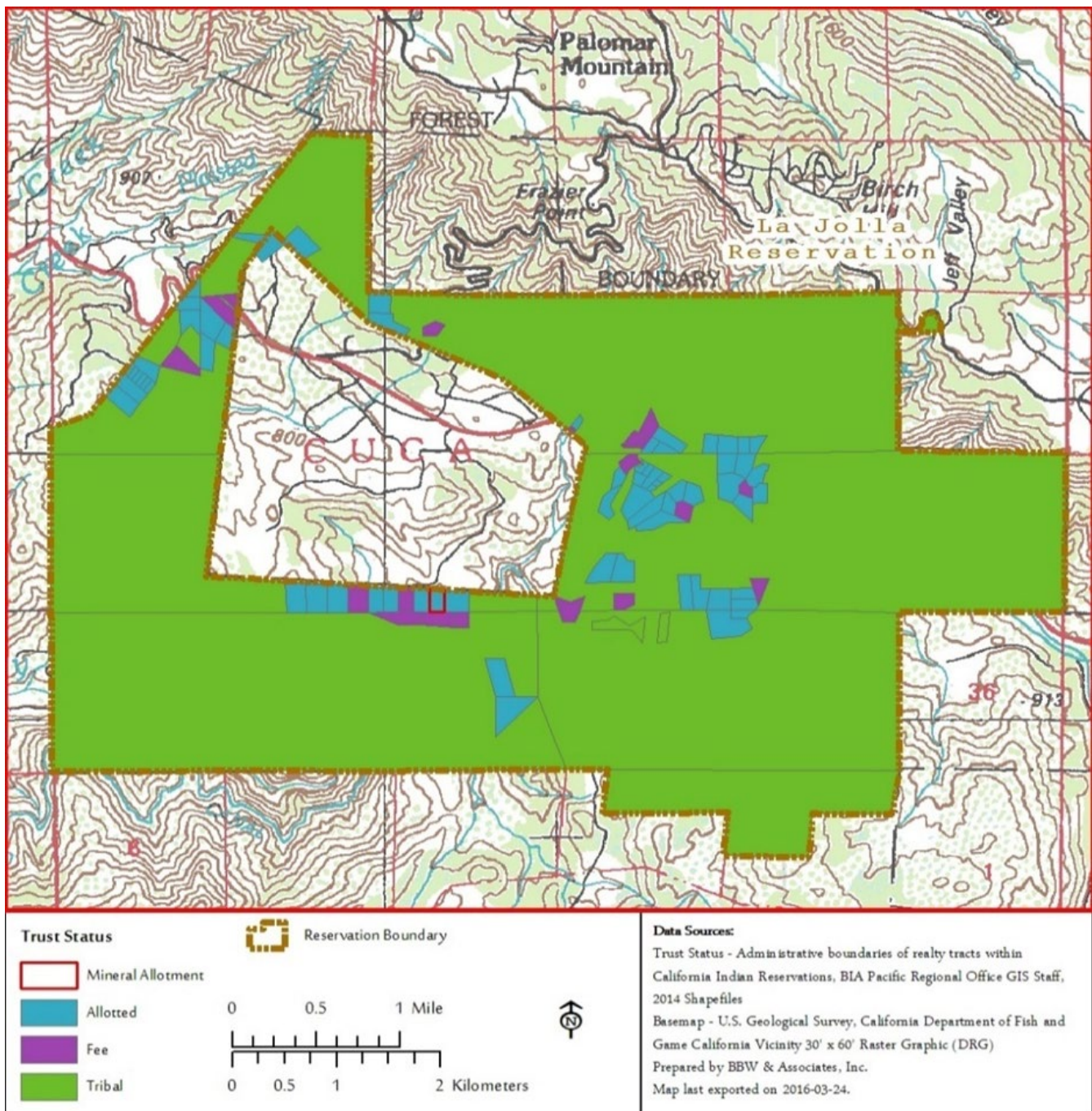


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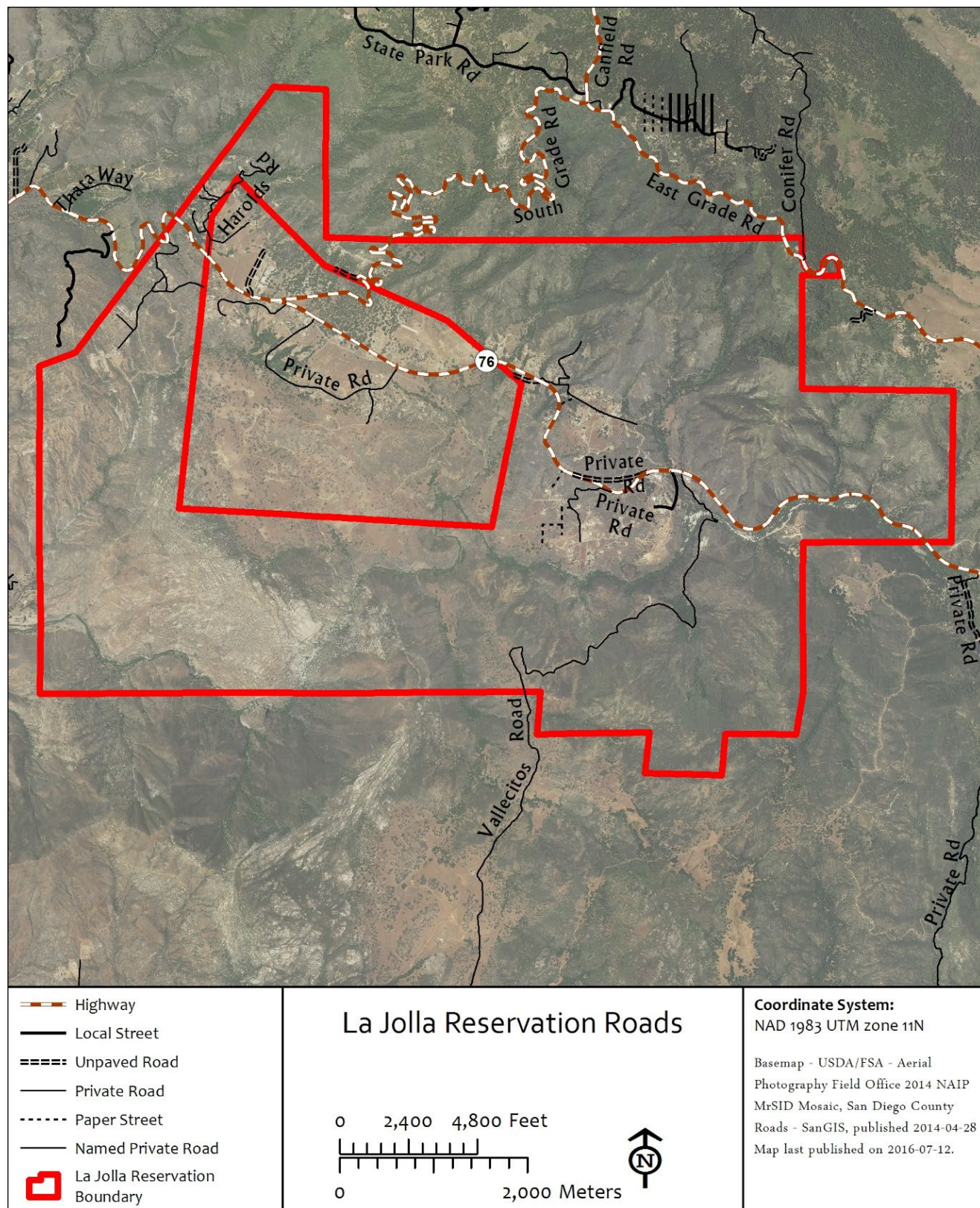
874 MAP 2. BOUNDARY AND TOPOGRAPHY



MAP 3. SECTION MAP OVERLAYED WITH TRUST STATUS



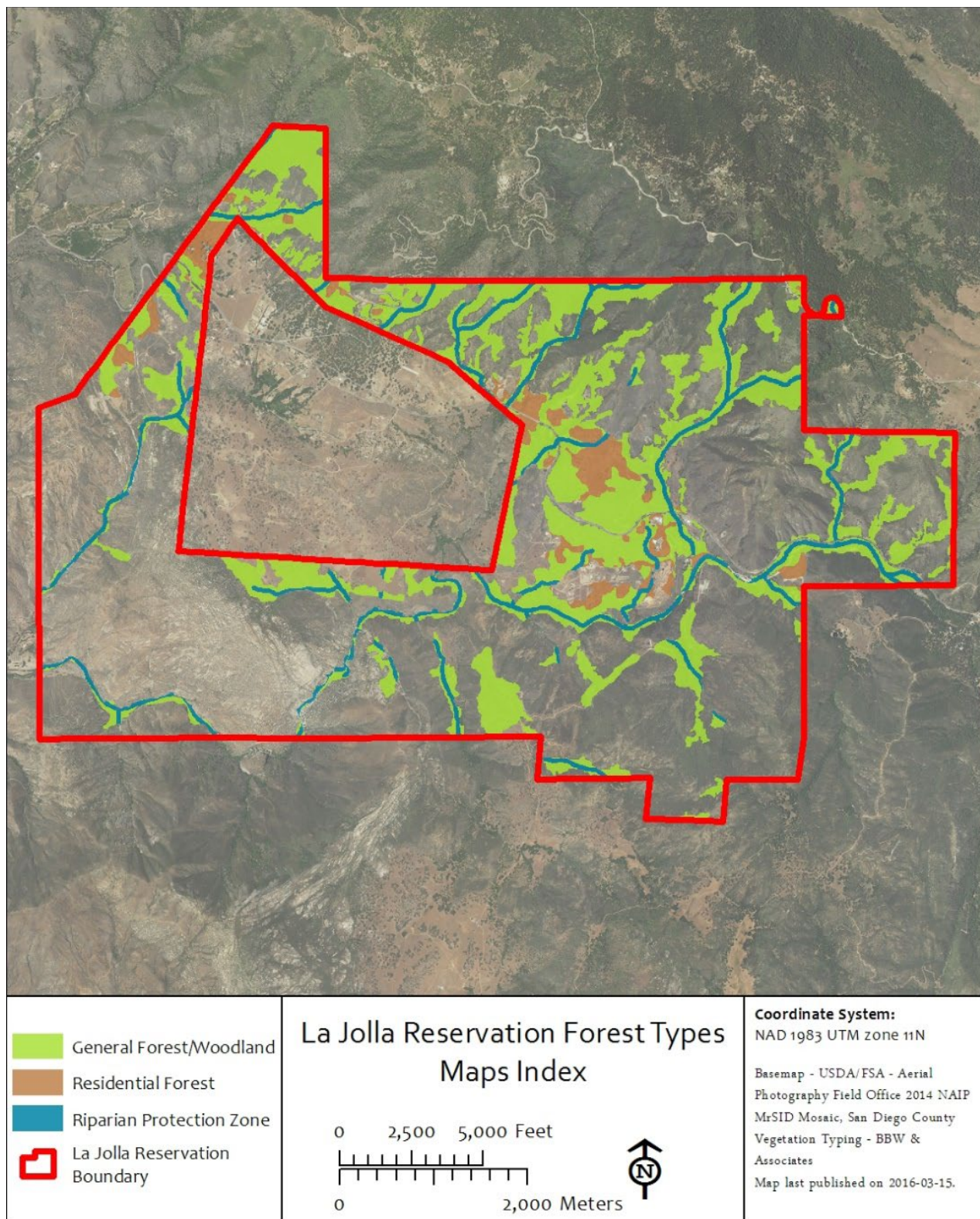
MAP 4. LAND OWNERSHIP MAP (TRIBAL TRUST, ALLOTMENT, FEE)



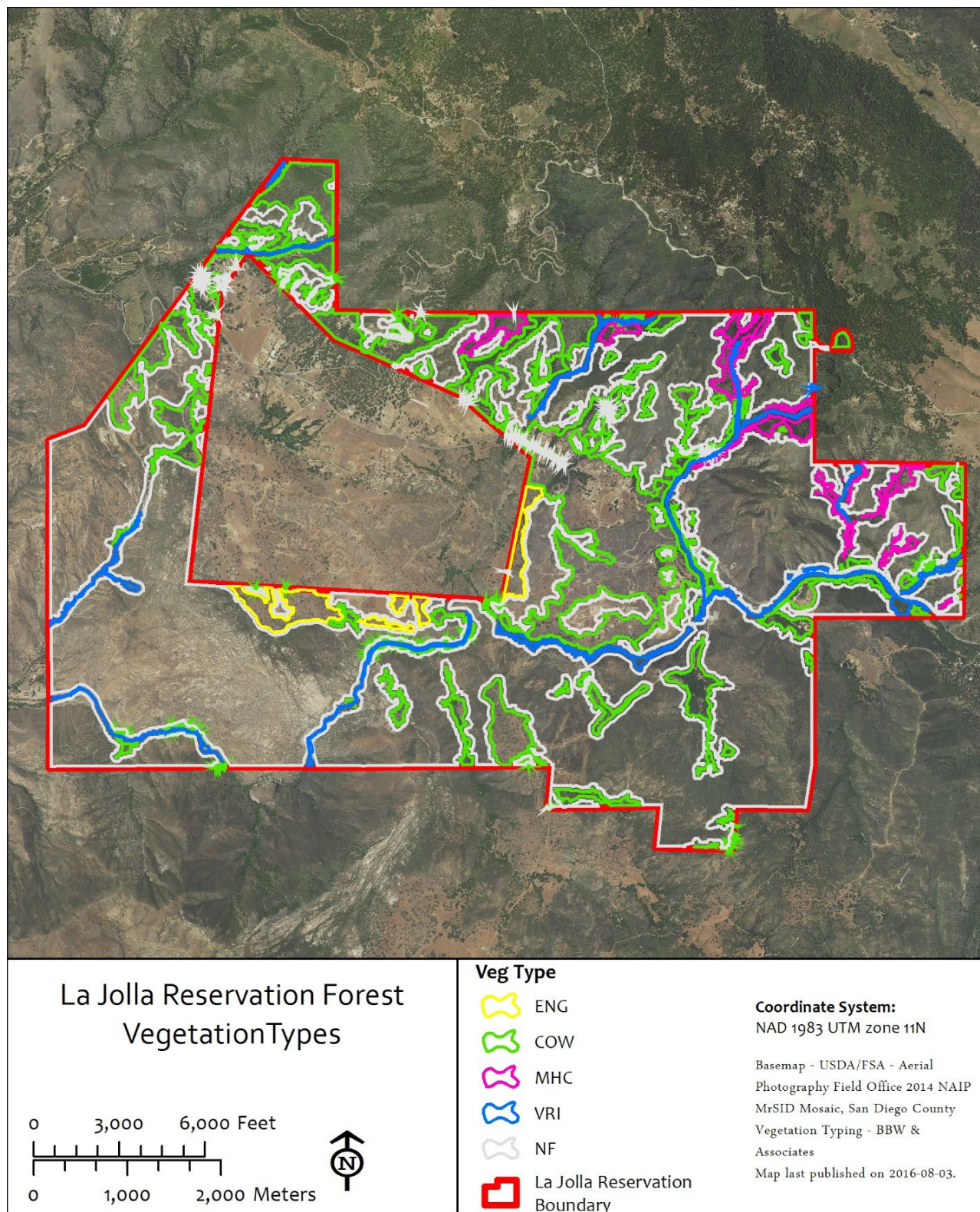
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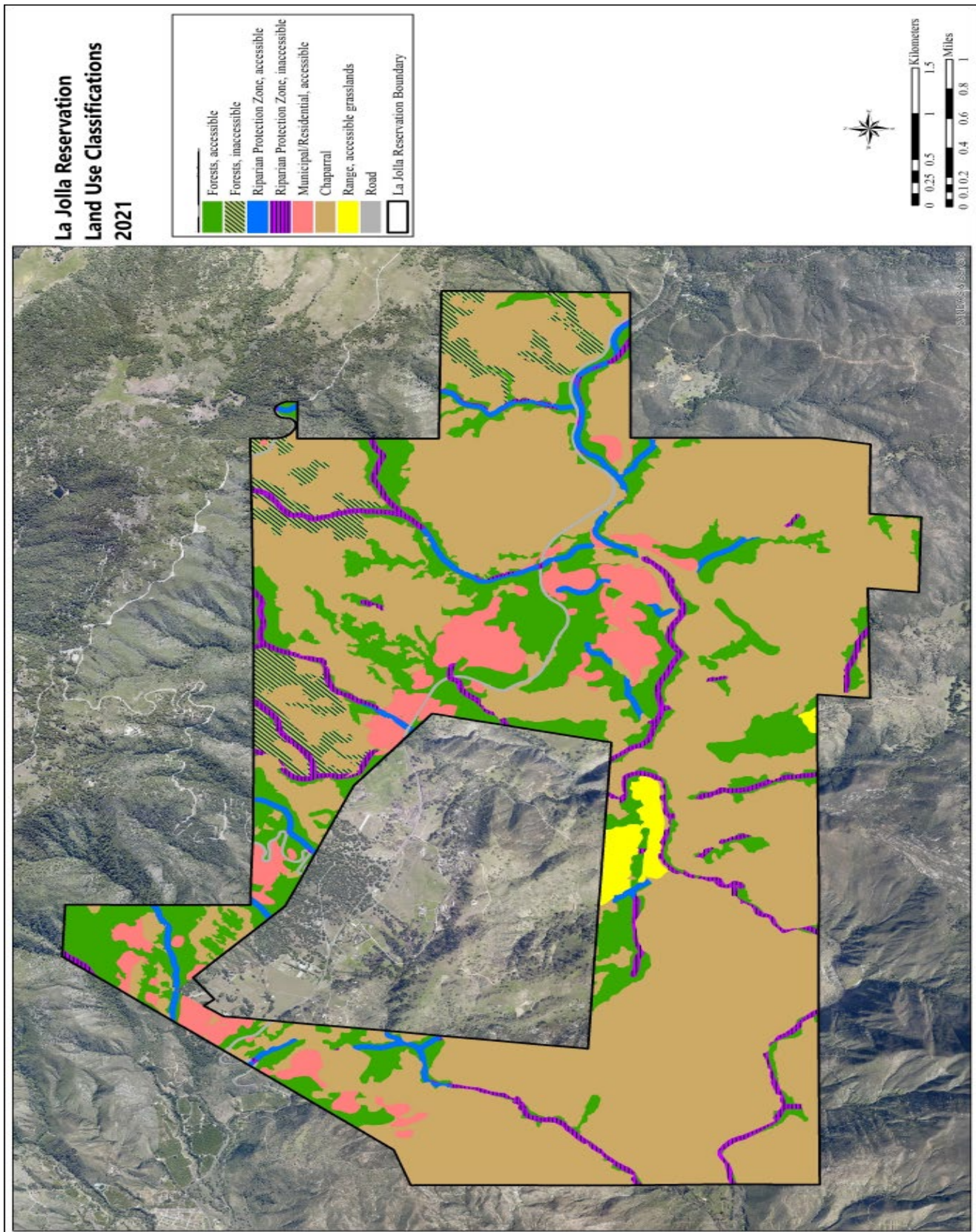
MAP 5. ROAD SYSTEM



MAP 6. FOREST USE ZONE

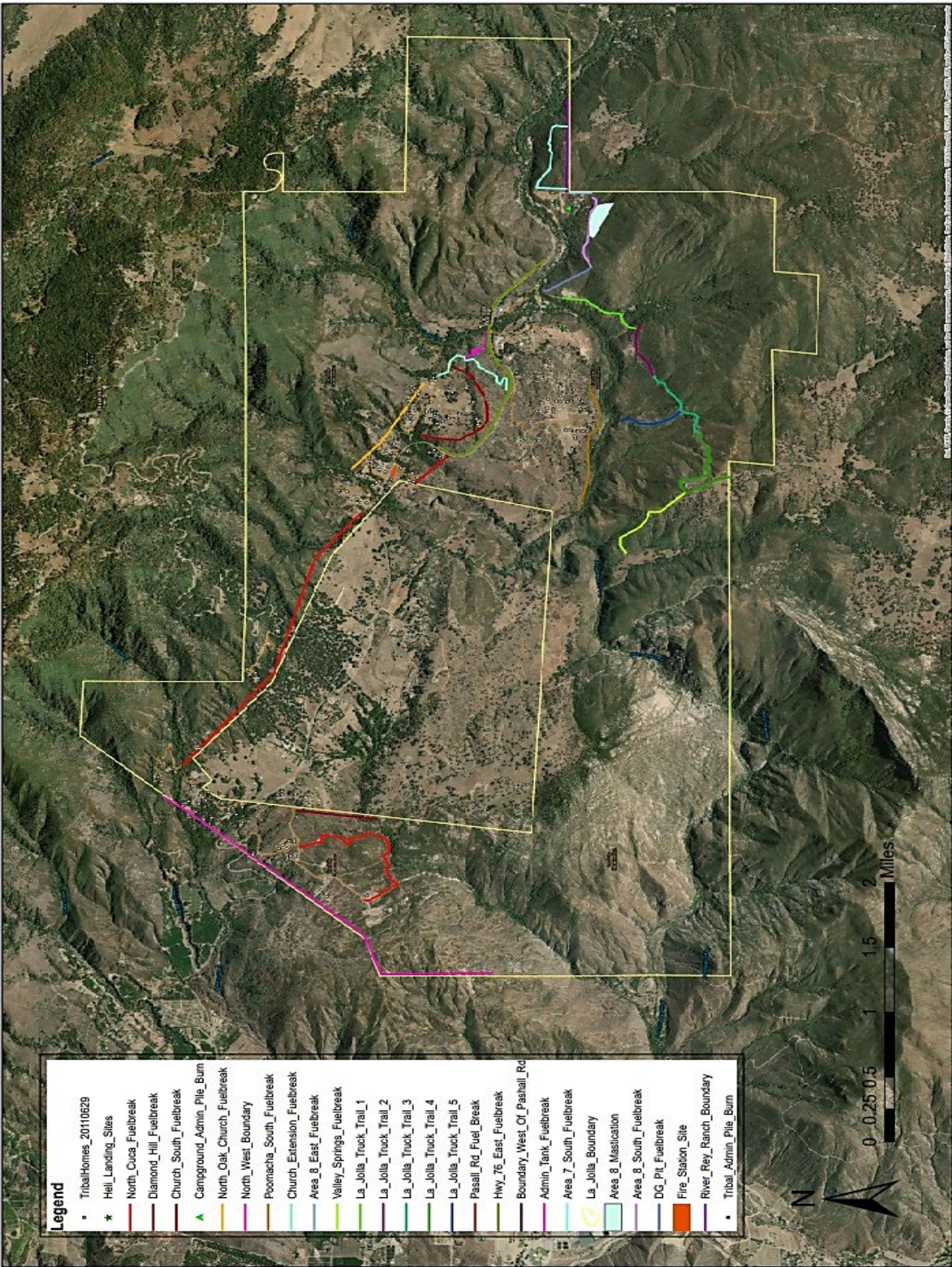


MAP 7. FOREST VEGETATION



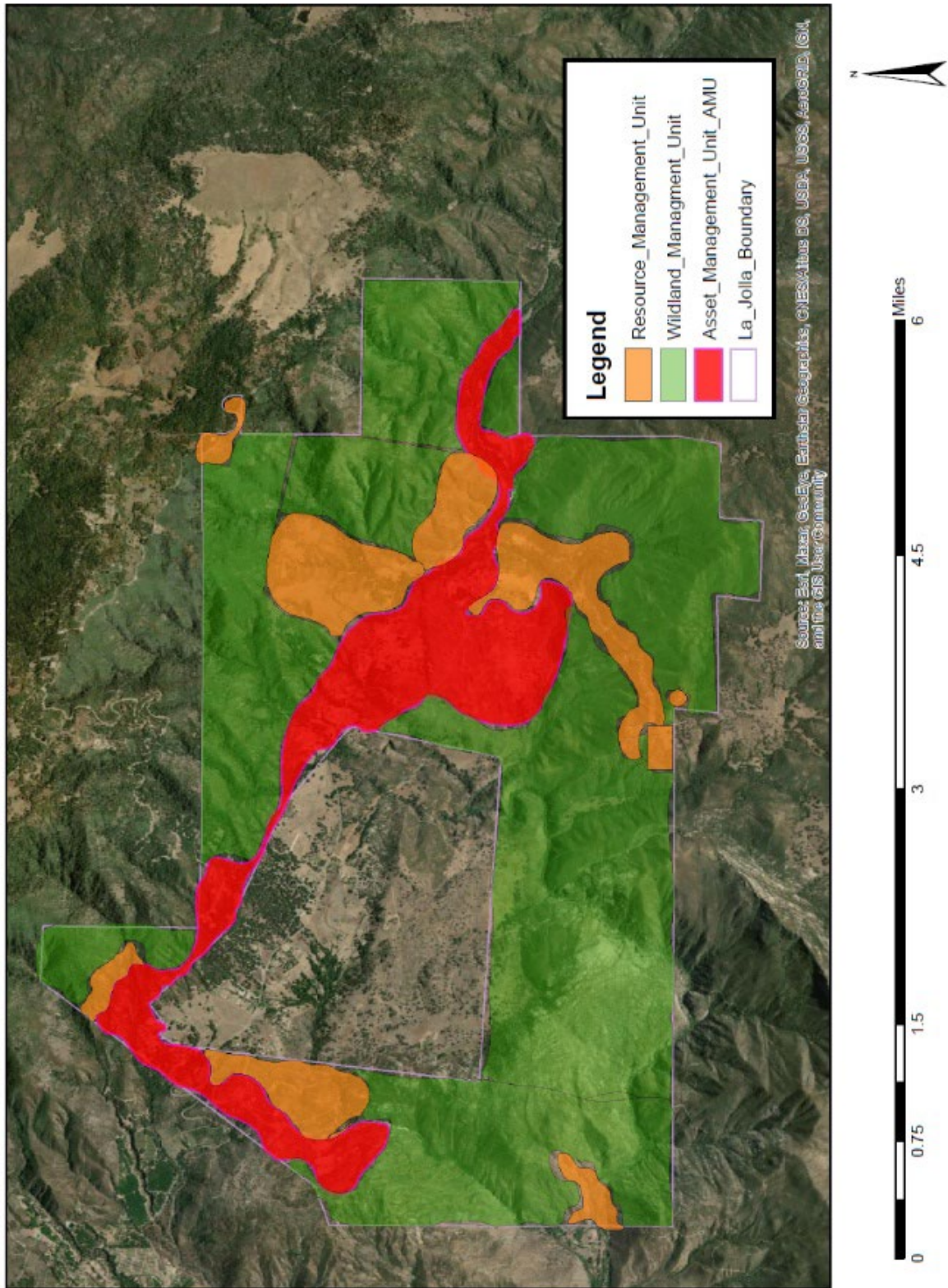
Map 9. Land Use Classification

La Jolla Prescribed Burn Pile Sites





Fire Management Units



By R. Stickney • Published August 22, 2019 • Updated on August 22, 2019 at 9:27 pm



A brush fire has been reported in the area near the La Jolla Reservation along State Route 76 and Red Gate Road

Photo. 3 Ariel news photo of brush fire.

3.0 FIRE & FOREST MANAGEMENT

3.1 Purpose and Need

The fundamental goal of fire and forest management on the La Jolla Indian Reservation is to safeguard Tribal resources and preserve traditional land uses for the benefit of the La Jolla Band of Luiseño Indians. The Reservation has a designated high-risk fire rating, making proactive and locally focused fire management essential.

Currently, the Reservation is covered by a BIA Southern California regional Wildfire Management Plan (2001) and a regional Fire Prevention Plan (2012). Recognizing that these broad plans do not fully address the Reservation's unique ecological and cultural landscapes, the La Jolla Tribe is undertaking the critical initiative to develop a new, site-specific **Tribal Fire Management Plan** and comprehensive **Prescribed Burn Plans**. This chapter outlines the foundational strategy for this effort, defining the roles, responsibilities, and cooperative framework for protecting the Reservation.

3.2 Roles and Responsibilities

Effective fire management on the Reservation relies on a multi-layered approach involving federal, tribal, and interagency partners.

3.2.1 FEDERAL TRUST RESPONSIBILITY (BIA)

The Secretary of the Interior, through the BIA Division of Wildfire and Forestry Management, holds the ultimate responsibility for overseeing wildland fire protection on Indian lands.

- The **Pacific Regional Office (PRO)** is responsible for the final approval of forest and fire management planning documents.
- The **Southern California Agency (SCA)** is responsible for program implementation, regional planning, and coordinating cooperative agreements. BIA-led strategies and tactical approaches for wildfire are detailed in the *BIA Southern California Tribes Prevention Management Plan*, the *Annual Fire Mobilization Plan*, and the *Arson Investigation Plan*.



3.2.2 TRIBAL RESPONSIBILITY (LA JOLLA FIRE DEPARTMENT)

The La Jolla Band of Luiseño Indians maintains its own dedicated Fire Department, which plays a central role in all-hazard response and proactive fire management. Key responsibilities include:

- Providing structural fire protection, emergency medical services, and rescue response.
- Managing forest fuels to reduce wildfire risk and improve forest health.
- Maintaining strategic fire breaks to prevent the spread of fire across Reservation boundaries.
- Overseeing all aspects of fire planning, prevention, dispatch, training, and communications.

3.2.3 INTERAGENCY COOPERATION AND AGREEMENTS

Recognizing that no single agency can manage wildland fire alone, the Tribe relies on a robust network of interagency agreements to ensure a coordinated and effective response.

- **Direct Protection Area (DPA):** Through a master cooperative agreement, CAL FIRE provides direct wildfire protection services for approximately 2,000 acres of trust and fee lands on the Reservation.
- **Mutual Aid Agreements:** The Tribe has established mutual aid agreements with both CAL FIRE and the San Diego County Fire Authority.
- **Dispatch Services:** The Tribe maintains a dispatch contract with the San Diego Interagency Communications Center (SDICC), a collaborative federal and state entity that coordinates resource sharing and suppression activities during incidents.

Through these agreements, the La Jolla Fire Department shares initial attack responsibilities on approximately 10,000 acres of adjacent private, state, and federal lands. While land management strategies may differ between agencies, pre-season planning meetings and resource mobilization guides ensure that Tribal cultural, religious, and natural resource policies are communicated and respected during all cooperative efforts.

3.3 Description of the Area



Photograph 2. LJIR from NE Corner

The La Jolla Indian Reservation (LJIR) is nestled within a remote, rural, and mountainous region situated on the southwest-facing slope of Palomar Mountain, adjacent to the expansive Cleveland National Forest in Southern California. A significant geographical feature, the San Luis Rey River, meanders through the Reservation. The LJIR is characterized by rugged terrain, with considerable elevational variation, ranging from approximately 920 feet above mean sea level at its western boundary to a high of 5,080 feet at the northeast corner, showcasing the dramatic topography of the Palomar Mountain range. Palomar Mountain itself, with its prominent five-mile-long granite base, extends in a northwest to southeast direction across the landscape, intersected by various geological faults and river valleys that contribute to the area's complex terrain.

The climate of the La Jolla Indian Reservation experiences notable temperature fluctuations throughout the year. Typical temperature ranges span from the low 30s Fahrenheit during winter months to over 100°F during the peak of summer. Despite these summer highs, the area is recognized as one of the cooler regions within San Diego County, boasting a mean annual temperature of around 55°F. Precipitation primarily occurs in the form of rainfall, with the majority concentrated between the months of December and March, characteristic of the Mediterranean climate. The Reservation is located within one of the higher precipitation zones of San Diego County, with average annual rainfall varying significantly across its extent, ranging from approximately 21 inches in the southwestern areas to nearly 40 inches in the northeastern, higher elevation portions.

The dominant native vegetation communities found on the LJIR include coast live oak (*Quercus agrifolia*) woodlands, white oak (*Quercus garryana*) stands, chaparral dominated by various species of ceanothus (*Ceanothus* spp.) and chamise (*Adenostoma fasciculatum*), and manzanita (*Arctostaphylos*

spp.) shrublands. The land uses surrounding the Reservation are diverse, consisting of pasturelands, agricultural cropland, commercial developments in localized areas, various recreational facilities, and significant tracts of undeveloped natural land. To the north of the LJIR lies Palomar Mountain State Park, a historic gathering area for the Payómkawichum. The Hellhole Canyon Open Space Preserve and privately owned lands border the Reservation to the south. To the west, in the Pauma Valley region, are the Rincon Indian Reservation and privately held agricultural lands. Finally, the vast Cleveland National Forest and additional private lands form the northern and eastern boundaries of the La Jolla Indian Reservation. Within the west-central portion of the Reservation lies the historical Cuca Ranch land grant, representing a distinct land ownership pattern surrounded by tribal lands.



Photo. 4 Burned areas and a vehicle after the Poomacha Fire

Fire History on the La Jolla Indian Reservation

Wildfire represents a significant and ongoing threat to the La Jolla Indian Reservation (LJIR) and the surrounding region. This threat is primarily driven by the area's characteristically dry Mediterranean climate, which fosters the growth of highly flammable vegetation communities such as chaparral and oak woodlands. Historical fire data unequivocally confirms the recurring occurrence of wildfires in the vicinity and underscores their potential for devastating ecological, economic, and cultural consequences on the Reservation.

The following table (Table 13) provides a summary of reported fire incidents affecting the La Jolla Indian Reservation and its immediate surroundings between 2013 and 2022. This data highlights the frequency and various causes of these fire events:

Table 13. Fire History Chart (2013-2022)

Year	Description
2013	3 Human-caused wildfires: 1 occurred on the Reservation, 1 posed a direct threat to the Reservation's boundary.

2014 1 Human-caused wildfire occurred on the Reservation.

2015 3 Human-caused wildfires (1 on Reservation, 1 threatened the Reservation); 1 Natural-caused wildfire (lightning ignition).

2016 No wildfires reported (based on partial records available for this year).

2017 1 Wildfire of unspecified cause, along with 2 debris fires (likely human-caused).

2018 No wildfires reported (based on partial records available for this year).

2019 2 Arson-caused wildfires occurred on the Reservation, in addition to 1 residential structure fire.

5 Fires occurred on the Reservation: 2 were arson-caused, and 3 were accidental (vehicle fire, children playing with fire, fireworks by transient individual). 2 additional fires posed direct threats west of the Reservation boundary.

2021 2 Fires occurred on the Reservation: 1 caused by a transient individual, and 1 involving a vehicle.

2022 3 Fires occurred on the Reservation: 1 structural fire, 1 electrical fire, and 1 vehicle fire.

993 This historical fire data clearly illustrates the consistent risk of wildfire on and near the La Jolla Indian
994 Reservation. A significant portion of these ignitions are attributed to human activities, emphasizing the
995 critical need for robust fire prevention efforts, community education, and proactive fuels management
996 strategies to mitigate this ongoing threat and protect the Reservation's valuable resources. The
997 occurrence of both wildland fires and structure/vehicle fires highlights the diverse fire-related challenges
998 faced by the Tribe.

999 **Reservation Resources**

1000 The La Jolla Indian Reservation (LJIR) encompasses a resident population of approximately 1,000
1001 individuals living in several hundred homes. During peak summer weekends, the influx of tourists
1002 visiting the Tribal enterprise area can significantly increase the population by several thousand people,
1003 placing additional demands on infrastructure and resources. The Tribe operates a diverse range of
1004 departments and commercial enterprises, including: La Jolla Tribal Administration (the governing
1005 body), La Jolla Indian Campground & Zoom Zipline (tourism and recreation), La Jolla Natural
1006 Resources (managing environmental assets), La Jolla Reservation Fire Department (providing fire
1007 protection and emergency services), La Jolla Public Works Department (managing infrastructure),
1008 Education Department (providing learning opportunities), Court Services and Community Outreach
1009 (addressing legal and social needs), Tribal Law Enforcement (ensuring public safety), La Jolla Casino
1010 and La Jolla Water Park (gaming and recreation), and the La Jolla Trading Post (retail and essential
1011 goods). The Reservation's essential infrastructure includes numerous groundwater wells and associated
1012 pumphouses, a network of roads providing access throughout the territory, and various bridges spanning
1013 waterways and terrain features. The rich natural resources of the LJIR comprise valuable forests, native
1014 grasslands supporting biodiversity and traditional uses, a granite quarry with potential for economic
1015 development, areas designated for livestock grazing, a diverse array of wildlife species, and vital surface
1016 and groundwater resources. The majority of Tribal residents reside within one of five designated
1017 residential zones strategically located across the Reservation.

1018 A significant concentration of residential housing is located along Highway 76, where approximately
1019 five distinct groups of twenty-five to thirty homes each are situated along various named streets.
1020 Additionally, the primary Tribal enterprises and administrative structures, including the Tribal Hall

(government offices), the community gymnasium, the La Jolla Indian Campground, the Trading Post, the La Jolla Water Park, and the Zoom Zipline facilities, are all located on the eastern side of the Reservation, forming a central hub of activity and services.

Prescribed Fire Planning

The overarching goal of prescribed fire planning on the La Jolla Indian Reservation is to strategically promote the beneficial role of fire as a natural ecological process within the diverse ecosystems present. This planning also aims to carefully coordinate fuel treatment activities with effective strategies for managing unplanned wildfire ignitions. This critical integration is intended to protect valuable Tribal resources, enhance the overall resilience of the landscape to wildfire, and support specific ecological and cultural objectives. Current fuel management activities implemented to support forest protection and reduce wildfire risk include the routine maintenance of strategic fuel breaks, the creation and upkeep of defensible space and perimeter clearances around all residences, administrative offices, and designated campfire areas, and the appropriate treatment of activity-generated fuels, such as slash resulting from logging or vegetation management operations.



The prioritization of fuel break development and maintenance is determined based on the following key objectives, ensuring that available resources are directed towards the most critical areas and strategic goals:

- **Asset Protection Units (APUs):** Highest priority is given to fuel treatments within designated Asset Protection Units, which encompass all residential areas and revenue-generating Tribal enterprises, aiming to directly safeguard life, property, and economic stability.
- **Resource Management Units (RMUs):** Fuel treatments are prioritized within identified Resource Management Units to strategically enhance opportunities for wildfire confinement and the implementation of point protection strategies around valuable natural and cultural resources. These treatments also aim to promote the long-term ecological resilience of the broader landscape.
- **Visitor Use and Sensitive Areas:** Suppression strategies and targeted fuel treatments are prioritized in woodland areas that experience significant visitor use, contain known archaeological sites, provide access via key roads, and include existing or planned park developments, balancing recreation with resource protection.
- **High-Hazard and Strategic Locations:** Identify and prioritize high-hazard areas characterized by dense, continuous fuels and strategically important locations for fuel reduction projects. These projects aim to reduce or moderate extreme fire behavior, particularly at pre-planned Strategically Located Management Action Points (SLMAPs) that can be utilized during wildfire incidents.
- **Interagency Coordination:** Actively coordinate planning efforts, wildland and structural fire suppression activities, and fuel treatment projects with relevant external agencies (e.g., CAL FIRE, US Forest Service) and local fire departments to ensure a unified and effective approach to fire management across jurisdictional boundaries.

- **Culturally Significant Sites:** Plan and implement fuel treatments specifically designed to protect culturally significant sites, including traditional plant collection areas vital for cultural practices and sensitive mixed conifer stands holding ecological and cultural value.

Prioritizing the development and maintenance of these fuel breaks is essential to ensure that available financial and personnel resources are strategically directed towards preparing and protecting the most critical areas of the La Jolla Indian Reservation from the threat of wildfire.

The following table (Table 14) provides a detailed list of prioritized fuel breaks and pile burn sites excerpted from the draft prescribed burn plan. This list includes their assigned priority ranking, physical dimensions (length and width), estimated acreage, geographic coordinates (latitude and longitude), and the date of the last recorded maintenance where available. Strategically prioritizing these fuel breaks is essential to ensure that limited financial and personnel resources are efficiently directed towards preparing and protecting the most critical areas of the La Jolla Indian Reservation from the persistent and evolving threat of wildfire.

Table 14. Fuel Break and Pile Burn Priority List

ID	Fuel Break or Pile Burn Site	Length	Width	Acres	Lat	Long	Priority 0 to 100	Last Maintenance
13	North Cuca Fuel Break	10679	100	24.5	-116.892	33.297	95	
16	Diamond Hill Fuel Break	3703	100	8.5	-116.873	33.277	95	
17	Church South Fuel Break	4829	100	11.1	-116.866	33.278	95	
20	Campground Admin Site	variable	variable	100	-116.841	33.27	90	
15	North Oak Church Fuel Break	3822	100	8.8	-116.867	33.287	85	
18	Hwy 76 East Fuel Break	9096	100	20.9	-116.859	33.277	81	
11	Northwest Boundary	13312	100	30.6	-116.921	33.292	80	
2	Poomacha South Fuel Break	4705	100	10.8	-116.869	33.269	50	
19	Church Extension Fuel Break	3824	100	8.8	-116.86	33.279	45	
9	Area 8 East Fuel Break	769	100	1.8	-116.841	33.27	30	2023
10	Area 8 South Fuel Break	2585	100	5.9	-116.845	33.269	30	
3	Valley Springs Fuel Break	3342	100	7.7	-116.876	33.263	25	2025
4	La Jolla Truck Trail 1	2809	200	12.9	-116.854	33.268	25	2024
5	La Jolla Truck Trail 2	2010	200	9.2	-116.858	33.265	25	2024
6	La Jolla Truck Trail 3	2877	200	13.2	-116.865	33.261	25	2024
7	La Jolla Truck Trail 4	4764	200	21.9	-116.872	33.258	25	2024
8	La Jolla Truck Trail 5	2050	200	9.4	-116.866	33.263	25	2024
12	Pasall Well Road	6541	100	15.0	-116.913	33.287	20	
1	Poomacha Ridge Fuel Break	3703	100	8.5	-116.873	33.277	15	
14	West Cuca Fuel Break	2518	100	5.8	-116.91	33.292	15	
21	Fire Station Admin Site	variable	variable	0.0	-116.872	33.287		2022
22	Tribal Admin Site	variable	variable	0.0	-116.857	33.275		
23	Admin Tank Road	1568	100	3.6	-116.858	33.279		
24	Area 8 Mastication	variable	variable	0.0	-116.843	33.268		2021

La Jolla Indian Reservation Forest Management Plan

24	Rey River Ranch Boundary	3221	100	7.4	-116.835	33.271		
24	Area 7 South Fuel Break	3741	100	8.6	-116.836	33.272		
24	DG Pit Fuel Break	1766	100	4.1	-116.85	33.271		
	Total			258.8				

1075

DRAFT

Fire Management Strategy

All wildland fires occurring on the La Jolla Band of Luiseño Indians Indian Reservation will be managed using a **full suppression** strategy. This approach includes a comprehensive size-up of the current fire situation upon initial attack, a thorough determination of the probable cause of the ignition, an estimation of the potential for fire spread based on environmental factors, and the active implementation of suppression tactics. These tactics may involve the strategic application of water or fire retardant drops from aircraft, the tactical use of backfiring operations to remove fuel ahead of the main fire, and the construction of control lines using heavy equipment (where appropriate and with careful consideration of resource impacts) and hand crews. To minimize environmental impact, all available **non-ground-disturbing indirect attack tactics** will be prioritized and utilized before authorizing any ground disturbance activities.

For strategic fire management purposes, the La Jolla Band of Luiseño Indians Fire Management Area is geographically divided into three distinct **Fire Management Units (FMUs)**:

- **APU - Asset Protection Unit - Wildland Urban Interface (WUI) Residential, Tribal Enterprises:** This unit encompasses residential areas and critical Tribal infrastructure and revenue-generating enterprises.
 - **Primary Objective:** The paramount objective in the APU is the unwavering protection of human life and property, essential infrastructure, and high-value resources. This will be achieved without compromising the safety of firefighting personnel. A strong emphasis will be placed on proactive fuel treatment projects to create fire-adapted communities and reduce the overall wildfire risk within this zone.
 - **Primary Strategic/Operational Considerations:**
 - The highest priority for the allocation of available fire suppression forces will be assigned to incidents occurring within the APU.
 - Full suppression tactics, with a primary focus on establishing and maintaining perimeter control around the fire, will receive the highest allocation of suppression resources. Strategies such as confinement and allowing fire to burn for resource benefit will be highly limited within the APU and utilized only in rare, site-specific circumstances. Such instances will require documented direction and approval from the responsible Line Officer (e.g., strategically confining a small fire within a designated area to treat hazardous fuels once all structures are secure and the fire is burning away from them towards the RMU).
- **RMU - Resource Management Unit (typically mixed resource and WUI) Powerlines, Communications towers, wells, Watershed, oasis:** This unit typically represents areas with a mix of valuable natural resources and interface with the Wildland Urban Interface, including critical infrastructure like powerlines, communication towers, water wells, important watershed areas, and sensitive oasis ecosystems.
 - **Primary Objective:** The primary objective in the RMU is the protection of human life and property, along with high-value natural and infrastructure resources, while always prioritizing firefighter safety.
 - **Primary Strategic/Operational Considerations:**
 - Response to wildland fires within the RMU will be prioritized secondary to immediate threats within the APU.

- Suppression strategies in the RMU will focus on establishing robust buffer zones around high-value assets, including areas with some structures that are directly adjacent to off-Reservation structures and other significant values at risk on private property.
- The emphasis will be on achieving perimeter control where deemed necessary to protect identified values. Confinement and point protection strategies may be employed in other areas of the RMU based on established operational thresholds and a thorough risk assessment.
- **WMU - Wildland Management Unit (typically remote areas):** This unit generally comprises more remote and less developed areas of the Reservation.
 - o **Primary Objective:** With an unwavering emphasis on firefighter and public safety, the primary objective in the WMU is to utilize wildland fire to protect, maintain, and enhance natural and cultural resources. This includes enabling fire to function in its natural ecological role and maintaining the natural fire regime to the extent possible. A risk assessment approach will be employed, carefully considering the costs and associated environmental impacts of suppression actions in relation to the specific values being protected. Resource management objectives and firefighter/public safety will be the paramount considerations in all decision-making.
 - o **Primary Strategic/Operational Considerations:**
 - All available fire management strategies, including suppression, confinement, and managed wildfire, may be utilized as needed within the WMU, based on established operational thresholds and a comprehensive risk assessment that prioritizes resource values and objectives.
 - The use of Wildland Fire for Resource Benefit (WFRB) is a potential tool within the WMU, but will only be implemented under defined weather and fuel moisture conditions, supported by thorough documented decision analysis and a rigorous support process.
 - Given potentially limited access in remote areas of the WMU, control perimeter efforts will primarily focus on more accessible locations to maximize firefighter safety and operational effectiveness.

The unique characteristics of each FMU, including fuel types and loading, topographic features, historical fire occurrence patterns, and the specific values at risk, are carefully considered and visually represented on the attached maps to inform strategic and tactical fire management decisions within each unit.

Special Management Areas

To ensure the effective protection of specific sensitive resources during wildland fire incidents, the La Jolla Indian Reservation (LJIR) has designated certain areas as Special Management Areas. The specific resource protection goals for these areas, along with the current contact information for relevant Tribal resource advisors who should be consulted during fire operations, will be formally documented in the

Bureau of Indian Affairs (BIA) Annual Operating Plan and any special project agreements established with CAL FIRE.

Furthermore, to guarantee their protection according to explicit Tribal direction during fire incidents, all areas requiring restrictions or modifications to standard firefighting techniques must be clearly delineated on dedicated protection unit maps. Alternatively, these areas and the specific operational constraints applicable to them will be explicitly identified in relevant operating plans and pre-attack plans. This clear identification ensures that firefighting personnel are aware of and can adhere to the necessary protective measures.

The following table (Table 15) outlines the currently identified Special Management Areas on the La Jolla Indian Reservation. For all areas listed in this table, the Jurisdictional Agency with management authority is the LJIR, and the primary Protecting Agency responsible for wildland fire suppression is CAL FIRE, operating under cooperative agreements.

Table 15. Special Area Restrictions

Special Area Name & Resource Values	Summary of Restrictions
LJIR	Limited suppression tactics unless advisable by the Tribal designated READ. Notify Tribal Fire Department. Notify BIA SCA.
San Luis Rey River, Cedar Creek, and Riparian Areas	Minimum Impact Suppression Tactics (MIST). Use water drops but avoid retardant chemicals. No dozers except in critical situations. Build fire breaks with hand crews. Vehicles limited to existing routes.
Cultural/Archeological Resource Areas	Minimum Impact Suppression Tactics (MIST). Use water drops but avoid retardant chemicals. No dozers except in critical situations. Build fire breaks with hand crews. Vehicles limited to existing routes.
Oasis Preserve	Minimum Impact Suppression Tactics (MIST). Use water drops but avoid retardant chemicals. No dozers except in critical situations. Build fire breaks with hand crews. Vehicles limited to existing routes.
South Native Grasslands	Minimum Impact Suppression Tactics (MIST). Use water drops but avoid retardant chemicals. No dozers except in critical situations. Build fire breaks with hand crews. Vehicles limited to existing routes.

Fire Prevention Strategy

The overarching fire prevention strategy on the La Jolla Indian Reservation (LJIR) is to proactively reduce the potential for wildland fire ignitions and to mitigate the intensity and spread of any fires that do occur. This is achieved through the implementation of various activities, including the establishment and maintenance of defensible space around valuable assets and the strategic manipulation of vegetation to reduce fuel loads and alter fire behavior. It is critical to note that if any proposed fire prevention strategy has the potential to result in adverse ground-disturbing activities, such as significant vegetation removal that impacts soil stability or cultural resources, all applicable Resource Protection Guidelines must be strictly followed.

For the La Jolla Indian Reservation, the Bureau of Indian Affairs (BIA) strongly recommends maintaining a **defensible space** zone extending at least **100 feet** outward from all structures and other improvements. This defensible space can be strategically expanded around individual buildings and throughout residential areas to provide a critical buffer against encroaching wildfires.

Furthermore, it is a recommended best practice to remove **ladder fuels** (such as shrubs and small trees) that are growing beneath the drip lines of larger, more fire-resistant overstory trees. This targeted removal significantly reduces the potential for severe and destructive fire behavior, including crown fires (where flames reach the tree canopy), torching (individual trees burning intensely from the ground up), and intense heat generation from surface fires, thereby enhancing the survival of mature trees within the forest ecosystem. Additionally, where appropriate and ecologically sound, utilizing livestock grazing to reduce the volume of dry, fine, and highly flammable grass fuels is an advisable preventative measure.

The following table (Table 16) outlines specific fire prevention strategies tailored to different Forest Use Zones on the La Jolla Indian Reservation. **Note:** The abbreviation "GFW" (Wilderness Forest/Woodland) and "RF" (Residential Administration/Forest) require clear definitions elsewhere in this document for full understanding.

Table 16. Fire Prevention Strategies for La Jolla Indian Reservation

Forest Use Zone (Abbreviation - Full Name Needs Definition Elsewhere)	Prevention Strategy
RF – Residential Administration/Forest	Create 100’ of defensible space within or adjacent to residential development to decrease impacts from fire to improvements and to avoid fire carrying outside residential areas.
GFW – Wilderness Forest/Woodland	Monitor wilderness woodlands for fire resilience.
VRI - Riparian Protection Zone	Maintain or improve the functional elements that define the beneficial uses of these partially restricted zones (e.g., water quantity and quality, sediment prevention). Create defensible space adjacent to riparian protection zones where needed to decrease fire impacts.

A. Firesafe Clearances: Creating Defensible Space

Maintaining a robust defensible space around your home and other structures is a crucial step in protecting against the threat of wildfire. This involves creating a buffer zone where flammable vegetation is significantly reduced or eliminated. The following measures should be implemented to establish and maintain an effective defensible space:

- **100-Foot Clearance:** Clear all flammable vegetation, including grasses, brush, and trees, for a minimum of 100 feet around all structures. This creates a critical zone to slow or stop the spread of wildfire and provide firefighters with a safer area to defend your property.

- **Roof and Gutters:** Regularly clean all accumulations of pine needles, leaves, and other debris from your roof, eaves, and rain gutters. These materials are highly combustible and can easily ignite from embers.
- **Chimney Clearance:** Trim all tree limbs that are within 10 feet of your chimney. Additionally, trim any dead or overhanging limbs above your house or garage, as these can drop embers or catch fire.
- **Spark Arrestor:** Ensure your chimney outlet or flue is covered with a properly functioning spark-arresting mesh screen. This device helps prevent hot embers from escaping and igniting nearby vegetation.
- **Visible Address:** Make sure your street address is clearly visible from the road, especially at night, to allow emergency responders to easily locate your property in an emergency.
- **Water Access:** Ensure that a fire hydrant or a readily accessible water storage supply of at least 2,500 gallons is available for firefighting purposes in an emergency. Know the location and how to access these resources.
- **Woodpile Placement:** Store all woodpiles at least 30 feet away from buildings, fences, and other combustible materials. Keep the area around woodpiles clear of vegetation.
- **Deck Maintenance:** Clear all vegetation and other flammable materials from beneath your deck and porches. Consider enclosing the undersides of elevated decks with fire-resistant materials to prevent ember accumulation and ignition.

Guiding Policy

All wildland fire suppression activities will prioritize the safety of firefighting personnel and the public above all other considerations. Incident Commanders (ICs), Incident Management Teams, and all fire line supervisors bear the ultimate responsibility for ensuring safe operations. The suppression strategy will also consider the benefits and values to be protected, aligning with established resource objectives, and will be executed at the minimum cost consistent with safety and effectiveness. It is a fundamental principle that no fire situation, regardless of its severity, warrants risking human life to achieve faster containment, quicker extinguishment, or smaller burned areas.

The annual review process for all trust land forest protection and fire management functions is detailed in 53 IAM Chapter 1 and its associated supplement/handbook. This review includes a mandatory reporting schedule to assess the accomplishments of the preceding year. For further clarification regarding the policies and responsibilities related to wildland fire management on trust lands, refer to 90 IAM 1.2 (Policy) and 1.8 (Responsibilities).

1. Red Book: Provides national wildland fire management policy and guidance. (<https://www.nifc.gov/PUBLICATIONS/redbook/2020/Chapter06.pdf>)
2. Fuels reductions and wildfire prevention planning information. (<https://www.bia.gov/policy-forms/handbooks/90-IAM-5-h-wildfire-prevention-program-handbook>)
3. 53 and 90 IAM: Bureau of Indian Affairs Manual providing policies for trust land management. (<https://www.bia.gov/policy-forms/manual>)
4. 53 IAM Handbook: Handbook supplementing the Bureau of Indian Affairs Manual for trust land management. (<https://www.bia.gov/policy-forms/handbooks>)
5. Departmental Manual Part 620: Wildfire Response policies from the Department of the Interior. (https://www.doi.gov/sites/doi.gov/files/uploads/chapter_4_wildfire_response.pdf)

6. Wildland Fire Incident Management Field Guide: Reference guide for managing wildland fire incidents.
(<https://www.nifc.gov/nicc/logistics/references/Wildland%20Fire%20Incident%20Management%20Field%20Guide.pdf>)
7. Incident Response Pocket Guide (IRPG), PMS 461, NFES 1077: A quick reference guide for incident response personnel.
8. The NWCG Fireline Handbook, Appendix B Fire Behavior (NFES 2165): A guide for interpreting fire behavior. (<https://www.nwcg.gov/sites/default/files/products/appendixB.pdf>)
9. 2012-2025 California Master Cooperative Wildland Fire Management and Stafford Act Response Agreement: Agreement outlining cooperative fire management between agencies in California. (<https://gacc.nifc.gov/oscc/cwgc/docs/2013cfma/!!2018%20-%202025%20CFMA%20FINAL%20SIGNED.pdf>)
10. 2012 Strategic Fire Plan San Diego Unit (MVU): Strategic fire plan for the San Diego Unit. (<https://www.yumpu.com/en/document/read/17277283/strategic-fire-plan-san-diego-unit-mvu-board-of-forestry-and->)
11. 2020-2025 Agreement for Local Government Fire and Emergency Assistance to the State of California and Federal Fire Agencies: Agreement for local government assistance in fire and emergency response.
(https://www.caloes.ca.gov/FireRescueSite/Documents/May_1,2020%E2%80%93December_3_1,_2025_CFAA_Agreement_with_2020_Exhibits.pdf)
12. Annual BIA Grant and Cooperative agreement with LJIR on file in the Fire Chiefs office. (Note: No public link available)
13. 2018 San Diego Emergency Operations Plan Summary: Summary of the San Diego County Emergency Operations Plan.
 1. https://www.sandiegocounty.gov/content/dam/sdc/oes/emergency_management/plans/op-area-plan/2018/2018-EOP-Complete-Plan.pdf
 2. https://www.sandiegocounty.gov/content/dam/sdc/oes/emergency_management/plans/op-area-plan/2018/2018-Annex-B-Fire-Rescue-Mutual-Aid-Operations.pdf



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4.0 INSECT & DISEASE

“THE TERM “PEST” PROMOTES THE MISCONCEPTION THAT AN ORGANISM, RATHER THAN A POLICY OR PRACTICE, IS CAUSING A PROBLEM IN THE ECOSYSTEM (BOSHELL & DOLAN, 2017).”

Executive Summary

As a critical component of the Tribe's overarching Forest Management Plan (FMP), this chapter presents the detailed **Invasive Insect Management Plan (IIMP)**. It fulfills the FMP's requirement to address forest health threats by outlining a comprehensive strategy to protect the health, resilience, and diversity of Tribal forests, particularly the valuable oak ecosystems threatened by invasive insect infestations like the Goldspotted Oak Borer (GSOB).

Recognizing the critical role of healthy forests for ecological balance and the preservation of Tribal resources, this plan integrates traditional ecological knowledge with current forest entomology research. **Guided by established policy, including the Bureau of Indian Affairs manual (53 IAM Chapter 6)**, it establishes a clear framework for action built upon four pillars: **prevention, detection, management** (utilizing both silvicultural and insecticide approaches), and **restoration**.

The plan's immediate focus is on identifying threats, stabilizing current infestations, and implementing direct treatments. Concurrently, its long-term goal is to restore and maintain overall forest health, with specific strategies that include the potential reintegration of cultural burning practices. Grounded in recommendations from key partners—including the U.S. Forest Service, Bureau of Indian Affairs, and University of California Agriculture and Natural Resources Extension—this plan emphasizes that effective management relies on a collaborative approach involving Tribal members, partner agencies, and the public.

4.1 Introduction

Healthy forests are resilient ecosystems that require adequate light, water, and soil nutrients to thrive. On the Reservation, current forest conditions are characterized by extreme fire damage or significant overgrowth resulting from more than a century of fire suppression. This has created dense, unhealthy stands where trees are stressed by competition for essential resources, making them highly susceptible to pest infestations, disease, and wildfire damage. This Invasive Insect Management Plan, a critical component of the broader Forest Health Strategy, directly addresses these threats.



Photo 1. GSOB Larvae (Tamm 2019)

This plan integrates Traditional Ecological Knowledge (TEK) with current forest entomology research to create a multifaceted management approach. While its immediate focus is on threat identification, stabilization of current infestations, and direct treatment of harmful invasive insects, the ultimate purpose is to restore long-term forest health. It outlines proactive silvicultural practices, such as mechanical thinning and the reintroduction of cultural burning, to reduce overgrowth and improve the resilience of the forest.

By establishing clear procedures and drawing on recommendations from key partners—including the University of California Agriculture and Natural Resources Extension and the U.S. Forest Service—this document provides a framework for monitoring, response, and recovery from pest-related damages.

4.2 Goals and Objectives

The following goals and objectives establish the guiding principles and desired outcomes for all insect and disease management activities on Tribal lands.

4.2.1 GOAL

To protect and enhance the health, resilience, and ecological integrity of Tribal forests from the impacts of invasive and native pests, ensuring the long-term availability of forest resources and the preservation of cultural values.

4.2.2 OBJECTIVES

a. Prevention

1. Implement and enforce regulations and Best Management Practices (BMPs) to prevent the introduction and spread of new invasive forest pests and pathogens.
2. Conduct outreach and education programs for Tribal members, staff, and the public on the risks of invasive pests and preventative measures.
3. Maintain a robust monitoring and early detection system to identify new pest incursions promptly.
4. Promote forest health and resilience through proactive silvicultural practices (e.g., thinning, cultural burning) to reduce susceptibility to pest outbreaks.

b. Detection and Assessment

1. Conduct regular and systematic surveys to monitor the presence, distribution, and population levels of key forest pests, including Goldspotted Oak Borer (GSOB).
2. Develop and utilize effective methods for early detection of new and emerging pest threats, such as remote sensing, trapping networks, and citizen science.
3. Conduct thorough assessments of pest infestations to determine the extent of damage, potential impacts on forest resources, and the need for intervention.
4. Utilize Traditional Ecological Knowledge and scientific expertise to understand pest behavior, host susceptibility, and potential long-term consequences.

1350 **c. Management and Control**

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1. Implement timely and effective management strategies to control existing pest infestations, prioritizing Integrated Pest Management (IPM) approaches.
 2. Utilize silvicultural treatments (e.g., removal of infested trees, thinning) to reduce pest populations and improve forest health.
 3. Employ targeted insecticide applications strategically to protect high-value trees, replacement plantings, and sensitive areas, adhering to strict safety and environmental protocols.
 4. Explore and implement biological control methods where appropriate and feasible, ensuring their safety and non-target impacts are thoroughly evaluated.
 5. Develop and implement rapid response protocols for new and emerging high-risk pest infestations.

1361 **d. Restoration and Resilience**

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1. Implement reforestation and restoration efforts in areas impacted by pest infestations, prioritizing native and resilient tree species.
 2. Develop and implement strategies to enhance the long-term resilience of forest ecosystems to future pest outbreaks and other stressors.
 3. Monitor the effectiveness of pest management and restoration efforts to adapt strategies and improve outcomes.
 4. Integrate Traditional Ecological Knowledge into restoration practices to promote ecological balance and cultural resource preservation.

1370 **e. Capacity Building and Collaboration**

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1. Train Tribal staff in pest identification, monitoring, management techniques, and relevant regulations.
 2. Foster collaboration and information sharing with federal, state, and local agencies, universities, and other Tribal entities on forest pest issues.
 3. Identify and secure funding opportunities to support forest pest protection and management activities.
 4. Engage Tribal members and the public in forest pest awareness and management efforts through outreach and participation opportunities.

1379 **4.3 Primary Mission and Policy**

1380 4.3.1 MISSION STATEMENT

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The primary mission of the Invasive Insect Management Program is to minimize losses from insects, diseases, and other pests by implementing sound forest management practices. This program is dedicated to protecting and enhancing the health, value, resilience, and diversity of the Reservation's forests for the benefit of the Tribe.

1385 4.3.2 GUIDING FRAMEWORK

This plan is modeled on the U.S. Forest Service's (USFS) Invasive Species Systems Approach, which provides a framework for identifying problems and implementing mitigation actions. The core elements of this approach are:

- Prevention
- Detection
- Management
- Restoration

The strategies outlined in this document incorporate recommendations from the USFS and the Bureau of Indian Affairs (BIA) and are informed by peer-reviewed research to ensure the protection of Tribal interests.

4.3.3 POLICY AND AUTHORITY

The implementation of this plan is guided and authorized by the following key policies and legislation:

- **Federal Legislation:** Authority is derived from federal laws including **The Timber Protection Act of 1922** and the **Cooperative Forestry Assistance Act of 1978** (specifically Section 5, which authorizes the protection of forests from insects and diseases).
- **Code of Federal Regulations (CFR):** General policy for forest pest management on Indian lands is outlined in **25 CFR Part 163** (Forest Management and Operations).
- **BIA Policy Manual:** Procedural details and responsibilities are further defined in the Bureau of Indian Affairs manual, specifically **53 IAM Chapter 6** (Forest Pest Management).
- **Inter-Departmental Agreements:** Funding and technical assistance are facilitated by the **Agreement of March 28, 1983**, between the U.S. Departments of Agriculture and the Interior.

4.3.4 AVAILABLE RESOURCES AND COLLABORATION

Technical Assistance (USFS) The State and Private Forestry Branch of the USDA Forest Service provides critical on-site and remote technical assistance through a cooperative agreement with the BIA. An entomologist or pathologist should evaluate any potentially destructive infestation. Available services include:

- Pest and pathogen identification.
- Development of pest management strategies.
- Support with remote sensing and GIS mapping.

Programmatic Support (BIA) The BIA provides a regional forest pest management program that supports the suppression of active infestations and funds preventative activities. This program is an integral part of maintaining and enhancing forest stand health on Indian lands. For observed forest health issues, the **Southern California Agency Forester** is the primary point of contact.

Grant Funding (BIA/USFS) Proposals for project funding can be submitted for national-level consideration. Assistance with the proposal process is available from the Regional Forester.

4.4 Management Framework and Program Components

This section outlines the strategic framework and core components of the Invasive Insect Management Program. It organizes key directives and activities into four distinct but interconnected phases: Prevention, Detection, Management, and Restoration.

4.4.1 PREVENTION AND OUTREACH

This component focuses on proactive measures to stop the introduction and spread of invasive pests.

- **Primary Directive:** Implement Best Management Practices (BMPs) to prevent tree mortality from wood pests by reducing the movement of infested wood products. Promote the "Buy it Where You Burn It" campaign, as transporting infested firewood is a primary vector for spreading pests.
 - o Implement and enforce regulations on firewood transportation. Firewood importation into the campground has been banned since 2020.
 - o Support national and statewide firewood transportation regulation initiatives.
 - o Continue discussions with relevant agencies regarding potential quarantine measures for infested materials.
- **Outreach and Education:** Provide interpretive events, information, and display panels for Tribal residents and visitors. Develop outreach materials to inform the public and foster partnerships.
- **Research and Planning:**
 - o In collaboration with technical assistance providers, research Traditional Ecological Knowledge to develop and test the effectiveness of trapping, monitoring, and treatment methods.
 - o Develop and implement a science-based Integrated Pest Management (IPM) program focused on pest biology, impact assessments, trapping, and treatment options.

4.4.2 SURVEYING AND DETECTION

This component establishes protocols for identifying and monitoring pest populations to inform management decisions.

- **Primary Directive:** Evaluate all instances of significant mortality. This is defined as patches of dead or damaged tree cover exceeding 1/2 acre with over 25% tree death in the current year, or larger areas with over 1% tree death. Any field observation indicating a potential insect or disease problem must trigger a more intensive survey to monitor trends.
- **Survey and Monitoring Protocols:**
 - o Document the history and delimit the extent of GSOB and other pest infestations on the Reservation.
 - o Develop and adapt rapid response protocols for new or severe infestations.
 - o Utilize varied survey methods (e.g., grid maps, plot sampling, species-specific traps) based on the target pest.

- o Maintain all pest information, survey records, and maps at the Natural Resources Department and report positive survey results to management promptly.

4.4.3 MANAGEMENT AND CONTROL

This component outlines the specific actions to be taken when an infestation requires active intervention.

a. Silvicultural Treatments

1. **Tree Removal:** Establish a protocol for when and how to remove dead, infested, or susceptible trees to reduce pest population pressure in high-value areas.
2. **Sanitation:** Determine the resources needed to sanitize removed wood by chipping, grinding, burning, or tarping to eliminate insect populations.
3. **Thinning:** Consult a forester to determine if thinning will effectively decrease pest or pathogen damage by improving overall forest health.
4. **Cultural or Prescribed Burning:** Consult with fire practitioners and ecologists to evaluate the use of fire as a management tool for improving forest health and resilience.
5. **Pruning:** Determine if removing affected branches will slow or stop pest injury progression.

b. Insecticide Program

1. **Application:** Identify high-value trees where targeted insecticide treatments would be beneficial. Contract registered pesticide applicators for all applications.
2. **Timing:** Conduct cover/barrier spray applications before the insect breeding season to coincide with adult flight activity.
3. **Strategy:** Recognize that cover/barrier insecticides are often the most effective treatment for protecting healthy trees from attack, while spraying infested trees can reduce the reproductive success of emerging beetles.

c. Evaluation

1. **No Action Alternative:** For every situation, determine the long-term costs and ecological impacts associated with taking no action.
2. **Monitoring Program:** Develop and implement an effective monitoring program to evaluate the costs, benefits, safety, and environmental impacts of all management efforts, including pesticide use.

4.4.4 RESTORATION AND OAK SUSTAINABILITY

This component focuses on the long-term recovery of the forest ecosystem and the specific management of oak woodlands.

- **Primary Directive:** Develop and implement a comprehensive Oak Sustainability and Restoration Plan. This plan will guide resource allocation, provide cost estimates, and outline long-term management actions.

- o **High-Value Trees:** Identify and create protection plans for high-value oaks (e.g., culturally significant trees, campground trees).
- o **Reforestation:** Actively restock with native oak species and other appropriate native vegetation to prevent land type conversion to chaparral or grassland. This includes gathering seeds, growing stock, and addressing challenges in public recreation areas (e.g., soil compaction).
- o **Hazard Tree Abatement:** Implement a program to remove hazard trees to protect life and property.
- **Long-Term Resilience:**
 - o Achieve long-term pest management by reintroducing frequent cultural burns (every 5-7 years). This requires the prior completion of thinning and fuel modification projects to ensure fire can be reintroduced safely and effectively.
 - o Pursue grant funding to support all restoration and sustainability efforts.
 - o Collaborate with organizations and review scientific research to increase knowledge about native species, plant resistance, and restoration ecology.
 - o Synthesize monitoring results to assess the effectiveness of restoration actions and adapt management strategies accordingly.

4.5 Specific Pest Plan: Goldspotted Oak Borer (GSOB)

This section provides a detailed plan for managing the **Goldspotted Oak Borer (*Agrilus auroguttatus*)**, a significant invasive insect pest on the Reservation. First observed in 2014, its impact is projected to continue through at least 2035. A thorough understanding of its biology, impacts, and management is crucial for protecting the Tribe's valuable oak ecosystems.

4.5.1 GSOB BIOLOGY AND LIFE CYCLE

The GSOB is a buprestid beetle, also known as a metallic wood-boring or jewel beetle. Its life cycle is cryptic, with most of its development occurring hidden beneath the bark. This makes early detection difficult and allows significant damage to occur before infestations become apparent.

a. Physical Description

- **Adults:** The beetles are about 10 mm long with a dark, iridescent body. Their key feature is six distinctive golden-yellow pubescent spots on their hardened wing covers (elytra). Adults are active from May to October, with peak flight for mating and dispersal in June and July.
- **Larvae:** The destructive stage, larvae are legless, flattened, and grow to about 20 mm. They create meandering galleries in the cambium (the growth layer beneath the bark), feeding on vital tissues and effectively girdling the tree. These galleries are packed with frass (excrement) and turn black, disrupting the tree's ability to transport water and nutrients.
- **Pupae:** This transitional stage occurs in a chamber in the outer bark, typically from March to June, before adults emerge.
- **Eggs:** Tiny (0.25 mm), oval eggs are laid in bark crevices and are difficult to spot.

b. Feeding Habits and Life Cycle The GSOB typically completes its life cycle in one year, though it can extend longer. Upon hatching, larvae bore into the tree and feed on the cambium and phloem. This

larval feeding is what ultimately kills the tree. After emerging, adults feed on oak leaves for 10-14 days to mature before reproducing. This adult feeding causes minimal damage compared to the larvae. Understanding the GSOB life cycle, particularly peak adult emergence in summer, is critical for timing management actions like insecticide treatments and infested wood removal.

4.5.2 HOST SPECIES AND INFESTATION SIGNS

On the Reservation, GSOB primarily causes severe decline and mortality in **Coast Live Oak** (*Quercus agrifolia*), **California Black Oak** (*Quercus kelloggii*), and **Canyon Live Oak** (*Quercus chrysolepis*). Engelmann Oak and scrub oaks are not significantly impacted.

Identifying a GSOB infestation involves looking for the following key signs:

- a. **Crown Thinning:** A gradual loss of leaves starting at the top of the tree, progressing to dieback of major limbs. In some cases, the entire crown may brown out rapidly.
- b. **D-shaped Emergence Holes:** A definitive sign of infestation. These crisp, D-shaped holes are approximately 3 mm wide and are left by emerging adult beetles on the bark of the trunk and larger branches.
- c. **Bark Staining:** Dark, weeping patches or streaks on the bark surface, often a result of larval feeding underneath. This can lead to vertical and horizontal bark cracking.
- d. **Woodpecker Foraging:** Increased woodpecker activity that creates shallow, irregular flaking of the bark as they feed on larvae and pupae. This is distinct from the deep, round holes they create for acorn storage.
- e. **Epicormic Sprouting:** New shoots growing from the trunk and main branches are a stress response indicating the tree is in decline.

The widespread appearance of these signs across the Reservation since 2014 illustrates the scale of the crisis detailed below.

4.5.3 IMPACTS ON THE RESERVATION

a. Local History and Spread

The Goldspotted Oak Borer (GSOB) infestation represents a significant crisis for the Reservation's forests and is of major cultural, historical, and financial importance. The timeline below details the progression of the infestation and the Tribe's response:

- **2014:** The first confirmed GSOB presence was identified within the LJIR Campground.
- **2019:** Escalating tree mortality in Campground Area 8 raised serious concerns, leading to the initial identification of 76 hazard trees.
- **2020:** Surveys revealed the scale of the problem, estimating that 250-300 trees in Area 8 alone required removal.
- **2021–2024:** A period of large-scale proactive removal was undertaken, resulting in an estimated 1,000 infested trees being felled within the campground areas.
- **2025 to Present:** Management efforts have shifted to focus on immediate public safety threats. At least 50 high-risk trees have been removed from areas near homes and roads, specifically

targeting trees that have already fallen or were deemed to pose a risk of imminent structural failure or mortality.

b. The Crisis: Ecological, Economic, and Safety Impacts

The value of the lost and threatened oak trees is immense, extending far beyond the direct financial costs of removal and restoration. These oaks provide critical shade, wildlife habitat, food resources, and soil stabilization. The ongoing loss of the oak canopy threatens a long-term **land type conversion** to chaparral or grassland, which would fundamentally alter the ecosystem.

The sheer number of dead and dying oaks translates this loss of value into an escalating crisis with several critical dimensions:

1. **Direct Safety Risk:** Compromised trees pose a constant threat of sudden failure, endangering Tribal members, visitors, and emergency responders in campgrounds, on roads, and near administrative sites.
2. **Catastrophic Wildfire Risk:** Dead trees act as significant fuel, creating fuel ladders that can turn ground fires into intense, uncontrollable canopy fires. This dramatically exacerbates the Reservation's existing Class III fire hazard rating.
3. **Continued Pest Production:** Even after a tree's canopy is dead, the base can produce new generations of GSOB for up to two years, serving as a persistent source for new infestations.
4. **Barrier to Reforestation:** The presence of dead trees physically prevents the successful restoration and replanting required to heal the forest.

The scale of this crisis is quantified by both the extensive removal efforts already completed and the immense challenge that remains:

- **Past Removals:** To date, over 1,050 infested trees have been removed from critical areas, including approximately 300 from Campground Area 8, 600 from other campground areas, and 100 along the zipline road.
- **Remaining Hazard:** A recent analysis using high-resolution multispectral imagery has identified over **1,000 additional trees** that are dead or in severe decline within 100 feet of homes and roads, representing an ongoing and significant hazard.

4.5.4 GSOB MANAGEMENT STRATEGY AND ACTIONS

In response to the impacts detailed above, all GSOB management strategies are guided by core Tribal values emphasizing ecological balance and long-term forest health. The approach is proactive and integrated, combining scientific research with traditional ecological knowledge to suppress GSOB populations, protect high-value trees, and restore the resilience of the oak woodlands.

a. Program Management and Forest Health Initiatives

1. **Protect High-Value Trees** by establishing a formal identification system and conducting annual health assessments.

2. **Build Internal Capacity** by continuing to develop the forestry crew's rapid response capabilities for addressing GSOB infestations.
3. **Implement Hazard Tree Abatement** through a comprehensive program to address the immediate and future threats **(detailed in 4.5.3b)**. **Secure Necessary Resources** by identifying and pursuing funding opportunities to support all GSOB management and forest health initiatives.
4. **Continue Targeted Insecticide Use** by implementing an application protocol to protect high-value and replacement trees from infestation.
5. **Promote Forest Resilience** by thinning suppressed and overly dense stands to improve the overall health of remaining trees.
6. **Leverage External Expertise** by collaborating with UCANR, BIA, and USFS technical assistance programs to enhance identification, monitoring, and trapping.
7. **Implement a Reforestation Program** to plant and maintain replacement native oak trees.

b. Best Management Practices (BMPs) for Infestation Control

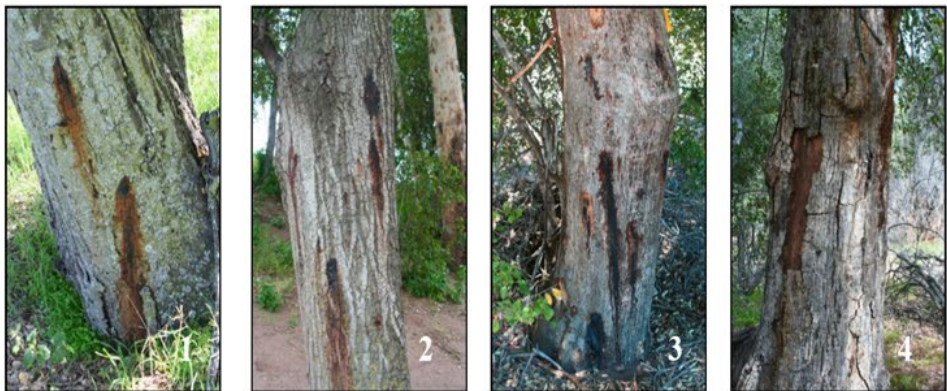
1. **Remove Brood Trees** to disrupt the cycle of **continued pest production (detailed in 4.5.3b)**.
2. **Sanitize Infested Wood** promptly after felling by enclosing it in screens, chipping, grinding, or heat-treating it to kill larvae and prevent beetle escape.
3. **Time Removals Strategically** by cutting and processing dying trees within the first few years of decline to disrupt optimal GSOB development.
4. **Prevent Accidental Spread** by requiring the use of sanitized tools for all tree trimming operations.
5. **Reduce Tree Stress and Injury** by promoting designated traffic routes to prevent root compaction and discouraging the practice of nailing items to oak trees.
6. **Enhance Natural Resistance** by using cultural burning and other forest health practices to improve the vigor of the overall forest.
7. **Conduct Timed Surveys** to ensure rapid detection and response to new GSOB hotspots and emerging brood trees.

HEALTH RATING FOR GSOB-INFESTED TREES



CROWN RATING

1. Full, healthy crown (0% leaf loss). 2. Minor twig dieback and/or light thinning (10-25% leaf loss). 3. Moderate thinning and twig dieback (25-50% leaf loss). 4. Severe dieback to larger branches (>50% leaf loss). 5. Tree is dead.



BARK STAIN RATING

1. One to five areas of staining present on lower stem (<8 feet). 2. Six to 10 stained areas. 3. Greater than 10 areas of staining on the lower stem. 4. Bark cracking evident on main stem.



EXIT HOLE RATING

1. Can find at least one D-shaped exit hole on the main stem. 2. Can find a few exit holes (10-25) in clumps on the main stem. 3. Exit holes are scattered and abundant on the main stem (>25).

Figure 1. GSOB Field ID Guide
(http://ipm.ucanr.edu/PDF/MISC/GSOB_field-identification-guide.pdf)

5.0 FOREST PRODUCT HARVESTING PERMITS

Article 1: General Provisions

Section 1.01 Purpose and Intent Timber is a significant and valuable natural resource on the La Jolla Indian Reservation (LJIR). The La Jolla Band of Luiseño Indians (Tribe) recognizes the vital importance of active resource management, control, and preservation. The Tribal Council establishes these regulations to govern the harvesting of forest products in a clear and equitable manner. While acknowledging the Tribe's primary interest in these resources, this policy also provides a pathway for individuals and entities beyond Tribal enterprises to meet their legitimate needs for wood products. This chapter establishes a formal permit system consistent with the regulations and practices of the Bureau of Indian Affairs (BIA), particularly 25 CFR Part 163.

Section 1.02 Definitions For the purposes of this chapter, the following terms shall have the meanings ascribed to them:

- **Cord:** A unit of volume equal to 128 cubic feet, typically measured as a stack of wood four feet high, four feet wide, and eight feet long.
- **Permittee:** Any person or entity holding a valid wood-cutting permit issued under this chapter.
- **Stumpage Value:** The estimated monetary worth of standing timber or other forest products prior to harvest.
- **Tribal Land:** All land held in trust for the Tribe within the exterior boundaries of the LJIR. This definition specifically excludes individual allotments and fee land.
- **Wood Cutting:** Any removal of forest products from Tribal Land that is not conducted under a contractual sale agreement with the La Jolla Band of Luiseño Indians. This includes, but is not limited to, the taking of green wood, dry wood, dead wood, boughs, cones, poles, and posts.

Article 2: Permit System

Section 2.01 Permit Required No individual or entity shall engage in Wood Cutting on Tribal Land without possessing a valid permit issued pursuant to this chapter, unless specifically exempted under Section 2.03, "Free-Use Harvest Without a Permit." For any harvest of forest products valued at less than \$15,000 where a formal contract is not required, a Timber Cutting Permit (BIA Form 5-5331) or the free-use policy shall be utilized. (*Authority: 25 CFR §163.26; 25 CFR § 163.27*)

Section 2.02 Permit Eligibility The following individuals and entities are eligible to apply for wood-cutting permits:

- Enrolled members of the La Jolla Band of Luiseño Indians, their spouses, and their children.
- Official Tribal Enterprises.
- Non-profit organizations, as approved by the Tribal Council on a case-by-case basis.
- Other persons, as approved by the Tribal Council on a case-by-case basis.

Section 2.03 Free-Use Harvest Without a Permit Enrolled Tribal members residing on the Reservation are authorized to harvest the following forest products from designated areas for personal use only (not for sale, trade, or exchange) without obtaining a written permit:

- Eight (8) cords of firewood (dead and down wood only) per household, per year.
- One (1) Christmas tree per household, per year.
- Thirty (30) fence posts per household, per year.
- Branches, nuts, sage, yucca, cactus, berries, and other plants for personal, religious, or ceremonial use.

All harvesters operating under this section must ensure no trash is left behind and that all slash (e.g., branches, tops) is lopped and scattered to a height of no more than two (2) feet. Violation of these terms is subject to penalties outlined in Article 4.

Section 2.04 Free-Use Permits The Tribal Forest Manager may issue Free-Use Permits (BIA Form 5-5331) for the following purposes. Products harvested under a Free-Use Permit cannot be sold, traded, or exchanged. The total value of products harvested by an individual under this permit type shall not exceed \$5,000 in a single fiscal year.

- Firewood cutting beyond the allowance in Section 2.03.
- Clearing of vegetation from residential or recreational leases.
- Harvesting fence posts beyond the allowance in Section 2.03.
- Miscellaneous cutting for educational, religious, or ceremonial use by authorized groups.

Section 2.05 Paid Permits Forest products harvested under a Paid Permit may be sold or exchanged. The total stumpage value of products cut under a Paid Permit shall not exceed \$15,000 per year.

- **Permit Value under \$1,500:** Products will be sold at the rates specified in the fee schedule (Section 3.01).
- **Permit Value over \$1,500:** Stumpage rates shall be determined by a formal appraisal. The volume of forest products will be estimated through cruising methods to an accuracy of +/- 10%.
- **Payment:** At no point shall the prepaid stumpage balance fall below 10% of the estimated permit value.
- **Issuance to Non-Tribal Entities:** Paid permits may be issued to non-tribal entities only when necessary to salvage value from fire, insects, disease, or other catastrophic events, and only if Tribal operators are unable or decline to harvest the materials in a timely manner.

Article 3: Fees, Valuation, and Trespass

Section 3.01 Stumpage and Fee Schedule The following values shall be used for Paid Permits under \$1,500 and for statistical valuation of Free-Use Permits.

- **Firewood (dead, all species):** \$10.00 per cord
- **Posts (green cedar):** \$2.00 per post

- **Posts (dead, all species):** \$1.00 per post
- **Christmas Trees:** \$5.00 each
- **Sawtimber (<12" DBH):** \$20 per MBF (Thousand Board Feet)
- **Sawtimber (>12" DBH):** \$50 per MBF (Thousand Board Feet)

Section 3.02 Privilege Tax Non-members obtaining a Paid Permit shall be required to pay a privilege tax of \$25.00.

Section 3.03 Trespass and Penalties Any unauthorized harvesting, removal, or intentional damage of trees or other vegetation on Tribal Land is considered trespass.

- **Penalties:** A violator shall be subject to civil damages equal to **triple the stumpage value** of the products.
- **Permit Revocation:** Any existing permits held by the violator will be immediately and permanently revoked.
- **Future Ineligibility:** The violator will be ineligible for future harvesting permits until all assessed damages are paid in full.
- **Criminal Prosecution:** The Tribe reserves the right to prosecute violators for forest product trespass under all applicable federal and tribal laws.

Article 4: Administration and Enforcement

Section 4.01 Approval Authority

- **Free-Use Permits:**
 - For Tribal members and enterprises: Approval by the Tribal Council or the Natural Resources Department.
 - For non-profits and non-Tribal members: Approval by the Tribal Council only.
- **Paid Permits:**
 - For Tribal members (value ≤ \$500): Approval by the Tribal Council or the Forest Manager.
 - All other Paid Permits: Approval by the Tribal Council only.

Section 4.02 Permit Contents and Conditions All permits (see Appendix 11 for example) shall contain:

- The full name of the Permittee.
- The specific, mapped location(s) authorized for removal.
- The authorized amount, species, and type of wood products.
- The effective dates of the permit.
- Any additional conditions or stipulations. The Permittee is responsible for adhering to all conditions. Failure to comply will subject the Permittee to penalties under Section 3.03.

Section 4.03 Permit Display and Portability The Permittee must have their valid permit in their possession at all times while harvesting and transporting forest products. Upon request by a Tribal member, Tribal employee, La Jolla Police Officer, or other authorized law enforcement, the Permittee must present the permit for inspection.

Section 4.04 Permit Transferability No permit issued under this chapter may be transferred to another person or entity without the explicit written consent of the original approving authority.

Section 4.05 Permit Revocation The approving authority may revoke a permit for failure to comply with its conditions or the provisions of this chapter. Additionally, all permits are subject to emergency revocation by order of the Forest Manager during Red Flag Warnings or other periods of extreme fire danger.

Section 4.06 Enforcement Authority After the adoption of supporting ordinances, The La Jolla Police Department shall have primary responsibility for enforcing this chapter, assisted by the Tribal Forest Manager and other designated Natural Resources staff.

Section 4.07 Confiscation of Products Any forest products harvested in violation of this chapter may be confiscated by the enforcing authority and will be disposed of as directed by the Tribal Council.

Section 4.08 Removal from Reservation A citing officer will have the authority to remove or escort any individual found violating permit requirements from the LJIR.

6.0 TRESPASS: PROTECTING OUR RESOURCES

Trespass on the Reservation is the unauthorized entry, use, damage, or removal of Tribal lands and resources. It is a serious offense that undermines the Band's sovereignty and stewardship. This plan addresses two primary categories of trespass: **forest resource trespass**, such as the illegal cutting of timber, and **fire trespass**, which includes negligently or intentionally set fires.

The Band is committed to protecting its cultural and natural heritage. Those responsible for trespass will be held liable for all damages, suppression costs, and may face criminal prosecution under Tribal, state, or federal law. We work closely with the Bureau of Indian Affairs (BIA) to ensure all incidents are investigated swiftly and that compensation is secured on behalf of the Indian landowner.

Key trespass challenges on the Reservation that this plan addresses include:

- Cattle grazing
- Unauthorized recreational access (e.g., rock climbers)
- Theft of cultural and natural resources (e.g., artifact hunting, illegal woodcutting)
- Illegal dumping and vandalism
- Arson and other human-caused fires

6.1 Governing Policies and Authority

Our authority to manage trespass is grounded in a framework of Tribal, federal, and state law. All actions are guided by the following key authorities:

- **Bureau of Indian Affairs (BIA):** The primary guiding documents are **53 IAM Chapter 7-H (Trespass)** and its handbook, which outline BIA policy and procedures.
- **Code of Federal Regulations (CFR):** Federal regulations specify damages, penalties, and payment demands in **25 CFR § 163.29** and establish burn permit requirements in **25 CFR § 247.17(a)**.
- **Federal & State Law:** Because California is a **Public Law 280** state, jurisdiction is shared. This grants the state authority to enforce certain prohibitory laws on the Reservation. Key statutes include the **Indian Law Enforcement Reform Act** and **California Health & Safety Code § 13009**, which holds individuals liable for fire suppression costs.

6.1.1 OUR STRATEGY FOR TRESPASS MANAGEMENT

To combat these issues, we employ a comprehensive strategy focused on proactive deterrence, rapid investigation, and coordinated enforcement.

1. Deterrence and Prevention- The most effective way to stop trespass is to prevent it from happening. Our primary management directive is to **clearly mark Reservation boundaries** in high-priority areas with signs and, where appropriate, fencing. While a 2016 inventory found no evidence of timber trespass at that time, clear demarcation is a crucial proactive measure to prevent future incidents.

2. Detection and Investigation - To enhance our detection capabilities, we will incorporate **biannual drone surveys**. This technology will allow us to visualize the Reservation's land structure in high detail, helping us identify anomalies such as illegal grows or unauthorized habitation. These sites not only represent a significant resource trespass but also create potential **points of ignition** for wildfires.

In addition to technological surveillance, all Tribal members and agency personnel are encouraged to report suspected illegal activities immediately.

- **General Trespass:** The BIA Regional Natural Resources Officer will ensure an initial investigation is conducted to document the land status, assess the value of lost resources, and determine the extent of the damage. A critical management directive is that **all trespass incidents shall be concurrently reported to tribal Law Enforcement and the San Diego County Sheriff's Department**. This dual reporting ensures a proper, coordinated jurisdictional response under Public Law 280.
- **Fire Trespass:** Fire trespass can be unintentional (e.g., an escaped debris burn) or intentional (arson). A key directive is that **all initial attack fire personnel will be trained to preserve the fire's point-of-origin and protect potential evidence** at all human-caused fires. Once the scene is secure, a qualified fire investigator will be assigned to complete the case. Procedural guides are available in the 2016 Arson Investigation Plan.

6.1.2 KEY JURISDICTIONAL CONTACTS FOR INVESTIGATION AND PROSECUTION

Effective response requires seamless coordination between multiple agencies. The following table identifies the primary contacts for fire investigation and prosecution.

Table 9. Arson Investigation Contacts

Responsibility	Jurisdiction Agency/Unit	Address	Phone
Wildland Fire: Origin & Cause	CAL FIRE Rincon Station	16971 Highway 76, Pauma Valley, CA 92061	760-742-3243
Wildland Fire: Arson Investigation	CAL FIRE Rincon Station	16971 Highway 76, Pauma Valley, CA 92061	760-742-3243
Improvements: Origin & Cause	San Diego County Sheriff	39919 Highway 94, Boulevard, CA 91905	Dispatch: (858) 565-5200 Business: (619) 766-4585
Improvements: Arson Investigation	San Diego County Sheriff	39919 Highway 94, Boulevard, CA 91905	Dispatch: (858) 565-5200 Business: (619) 766-4585
Prosecution	San Diego County District Attorney	330 W. Broadway, San Diego, CA 92101	(619) 237-1351

7.0 POST-DISTURBANCE REHABILITATION: A PRELIMINARY FRAMEWORK

Significant disturbances like wildland fire, floods, or windstorms can leave Tribal forest lands vulnerable to severe damage. This section provides a preliminary framework for post-disturbance rehabilitation. The ultimate goal is to develop a comprehensive, operational **Burned Area Emergency Response (BAER) Plan** that is ready for immediate implementation.

In the chaotic aftermath of a major fire, the threat of flooding and debris flows often requires urgent action. Regional emergency teams may be deployed to implement stabilization measures without the benefit of full Tribal consultation. A pre-approved BAER Plan is essential to ensure that any emergency response on Tribal lands is guided by our specific cultural values and ecological priorities.

7.1 From Framework to Action: Planning and Pre-Implementation

A successful emergency response depends on having resources ready *before* a disaster strikes. Moving from this framework to a fully developed plan will require a significant focus on pre-implementation—stockpiling materials and creating ready-to-use kits. Key pre-implementation actions will include:

- **Stockpiling Materials:** Securing and storing essential stabilization supplies like sandbags, K-rails, and erosion control fabrics.
- **Sourcing Certified Supplies:** Ensuring a ready supply of **sterilized straw wattles**. Using sterilized materials is crucial to avoid introducing new, non-native plant species to the Reservation.
- **Developing Local Seed Banks:** A critical principle of our rehabilitation strategy is the **prohibition of importing outside seed sources** to prevent the introduction of new invasive species. To support this, we will:
 - Develop pre-packaged, culturally appropriate **native seed kits**.
 - Explore saving grass clippings from ongoing fuels management work. These clippings can provide a valuable local seed source for stabilizing heavily burned soils. While some of these grasses may be non-native, they are already established here, and using them avoids the greater risk of introducing new problem species.

7.2 Understanding the Rehabilitation Process

Our comprehensive BAER plan will manage the three distinct phases of post-disturbance recovery.

Phase 1: Emergency Stabilization (ES)

This is the immediate, short-term response to mitigate imminent hazards.

- **Purpose:** To protect life, property, and critical resources from post-fire threats.
- **Timing:** During or immediately after the event.
- **Example Actions:** Deploying pre-stocked sandbags and straw wattles, installing erosion controls, and posting warning signs.

Phase 2: Suppression Rehabilitation

This phase focuses on repairing damage caused directly by firefighting operations.

- **Purpose:** To mitigate the environmental impacts of suppression activities.
- **Timing:** Ideally completed before firefighting crews demobilize.
- **Example Actions:** Recontouring fire lines, installing water bars, and applying mulch or locally-sourced seed from our pre-planned stock.

Phase 3: Long-Term Rehabilitation

This non-emergency phase focuses on restoring ecological health over months and years.

- **Purpose:** To restore lands unlikely to recover naturally, re-establish native plant communities, and control noxious weeds.
- **Timing:** Months to years after the disturbance.
- **Example Actions:** Reforestation and large-scale application of native seeds from our pre-developed kits.

7.3 Guiding Authorities and Resource Protection

All rehabilitation activities will be conducted in accordance with governing policies and resource protection laws. Our BAER plan will be developed in accordance with these authorities, embedding environmental and cultural resource protection directly into emergency protocols.

- **Guiding Documents:** Our actions are governed by the **90 IAM (Indian Affairs Manual)**, **DOI Departmental Manual Part 620**, and the interagency **Burned Area Emergency Stabilization and Rehabilitation Handbook**.
- **Life and Safety First:** Actions necessary to protect human life will always take precedence.
- **Resource Advisors:** During an incident, the Incident Commander should ensure qualified archaeologists and biologists are available to advise personnel. Our BAER plan will identify key areas and outline protocols for these advisors to follow.

8.0 FOREST DOCUMENTATION, MONITORING, & RECORDS

The FMP should reference applicable Regional, Agency, and Tribal handbooks and instructions. It must specify record-keeping requirements, monitoring procedures, and schedules for periodic reviews, particularly for projects focused on forest resource protection. This section will detail how plan progress will be monitored to ensure adequacy and alignment with Tribal goals and objectives. To ensure effectiveness and viability, the FMP will include schedules for annual review and periodic revision with defined dates. Annual reporting of the plan and program accomplishments to the Tribal Council and individual owners is a beneficial practice for maintaining communication, resolving issues, promoting understanding, and providing regular opportunities for plan revision (53 IAM 2.8.C.11).

Record Keeping, Monitoring, and Reporting

All documents related to Forest Protection (memorandums, letters, reports, maps, records, etc.) will be retained by the BIA for three years, then archived according to federal record retention schedules.

All La Jolla Indian Reservation (LJIR) forestry-related records (budgets, treatments, program implementation, Quarterly Council Reports, Monthly Director Reports, incident reports) shall be scanned and digitally archived indefinitely in an accessible file.

Monitoring and Evaluation:

- **Project Monitoring:** All project activities will be monitored during implementation and at specified periods after completion.
- **Long-Term Observation:** Due to the long-term nature of forestry prescriptions, results will be observed over decades. Site-specific treatments on the LJIR can yield varied results due to unique environmental factors (topography, water availability, slope, temperature, genetics, microbiomes).
- **Success and Failure Tracking:** Records of both successful and unsuccessful treatments shall be documented and reviewed every five years to inform future practices.
- **Monthly Record Maintenance:** Records will be organized and maintained on a monthly basis.
- **Data Storage and Backup:** Records will be stored on the NRO shared drive and a digital hard drive in the NRO office. Biannual off-site backups are necessary due to the area's high wildfire risk.
- **Annual Program Review:** The forestry program will be reviewed annually to evaluate progress towards sustainable funding, forest health, cost efficiency, and wildfire risk reduction.

Reporting and Communication:

- **Landowner Updates:** Natural Resources Department staff will periodically update landowners on progress towards management plan goals.
- **Record Location:** All program documentation and records are maintained on the tribes SharePoint site.
- **Tribal Coordination:** The Natural Resources Department will work with the Agency on program documentation and record keeping, and report coordination efforts to Tribal and or General Council..

1909 **Integration with Other Plans:**

1910 Initiatives undertaken in accordance with the Natural Resources Conservation Service (NRCS) Management Plan
1911 (Appendix 8), such as periodic surveys and control measures for Goldspotted Oak Borer (GSOB) and other forest
1912 health concerns, will be documented and recorded as previously detailed.

1913 The Natural Resources Department will conduct a review of all proposed new or amended management plans to
1914 identify and resolve any potential conflicts of interest with this Forest Management Plan early in their
1915 development.

1916

1917 **9.0 RESOURCE MANAGEMENT COORDINATION**

1918 This chapter fulfills the requirements for resource management coordination as outlined in the Bureau of Indian
1919 Affairs (BIA) Indian Affairs Manual (**53 IAM 2.8.C.12**). Effective coordination among all resource programs—
1920 including timber, wildlife, water, range, and cultural resources—and with other Tribal organizations and external
1921 agencies is essential for the holistic and sustainable management of the La Jolla Indian Reservation.

1922 This chapter outlines the procedures for coordinating activities and ensuring consistent communication, and it
1923 explicitly identifies the Tribal position responsible for leading this effort. These procedures are guided by the
1924 Tribe’s Integrated Resource Management Plan (IRMP), which ensures a unified approach across all natural
1925 resource initiatives.

1926 **9.1 Integrated Resource Management Planning (IRMP)**

1927 The La Jolla Tribal Council ensures that all planning documents support the Tribe’s overarching goals and reflect
1928 the community's priorities. Recognizing that all resources are interconnected, planning for wildfire prevention,
1929 fuels management, and forest health are
1930 integral components of the Tribe's broader
1931 environmental strategy.

1932 Currently, integrated planning is a
1933 collaborative effort involving the Fire
1934 Director, Forest Manager, Public Works
1935 Department, Tribal Enterprises, and Tribal
1936 Council, who hold regular monthly meetings
1937 to ensure seamless coordination. The Tribe is
1938 in the process of developing a comprehensive
1939 IRMP to formalize this process, guarantee
1940 consistency between the Fire Management
1941 Plan and this FMP, and ensure that all Tribal
1942 departments and members are actively
1943 involved in resource planning and protection.
1944 The relationships and information flow central
1945 to this process are illustrated in Figure 9.1.

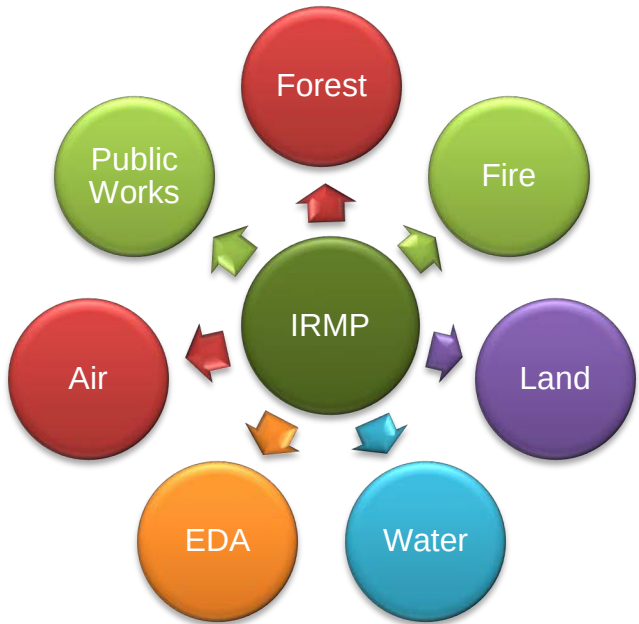


Figure 9.1: Integrated Resource Management Diagram

1948 **9.2 Governance and Consultation Framework**

1949 9.2.1 TRIBAL GOVERNANCE THE GENERAL COUNCIL, which includes all enrolled Tribal
1950 members aged 21 and older, serves as the ultimate governing body of the La Jolla Band. The **Tribal Council**, a
1951 five-member body elected by the General Council, represents the Band in all negotiations with local, state, and
1952 federal governments and oversees the departments responsible for implementing this plan.

Figure 2. Integrated Resource Management Diagram

9.2.2 Key Tribal Departments and Offices

Effective coordination requires clear roles and consultation pathways among the Tribe's departments. The lead department for any project will consult with the following entities during planning:

- **Natural Resources Department (NRD):** Led by the **Natural Resources Director**, the NRD is responsible for managing the Tribe's forest resources and maintaining this FMP.
- **Fire Department (FD):** Led by the **Fire Chief**, the FD manages wildfire incidents, implements fuel reduction programs, and will oversee prescribed burn activities.
- **Environmental Protection Office (EPO):** Led by the **Environmental Director**, the EPO implements environmental programs (water, air, waste) and ensures all projects align with the Tribe's overall environmental goals.
- **Water & Public Works Department:** Manages the Reservation's water and road infrastructure.
- **Tribal Historic Preservation Office (THPO):** Guided by the Culture Committee, the THPO holds key cultural information and must be consulted on all ground-disturbing projects to protect cultural resources.
- **Tribal Enterprises:** Coordinated by the Economic Development Advisory Committee, enterprises will be consulted to ensure projects align with and safeguard their operational needs.

9.2.3 EXTERNAL AGENCY ROLES

Coordination with the Bureau of Indian Affairs (BIA) is central to the management of trust resources.

- **BIA National Office:** Develops national forest planning policy, standards, and procedures.
 - **BIA Regional Director:** Develops regional guidelines and is the final authority for this FMP.
- BIA Southern California Agency (SCA) Superintendent:** Oversees local implementation of this plan and supports the Tribe's IRMP development efforts.

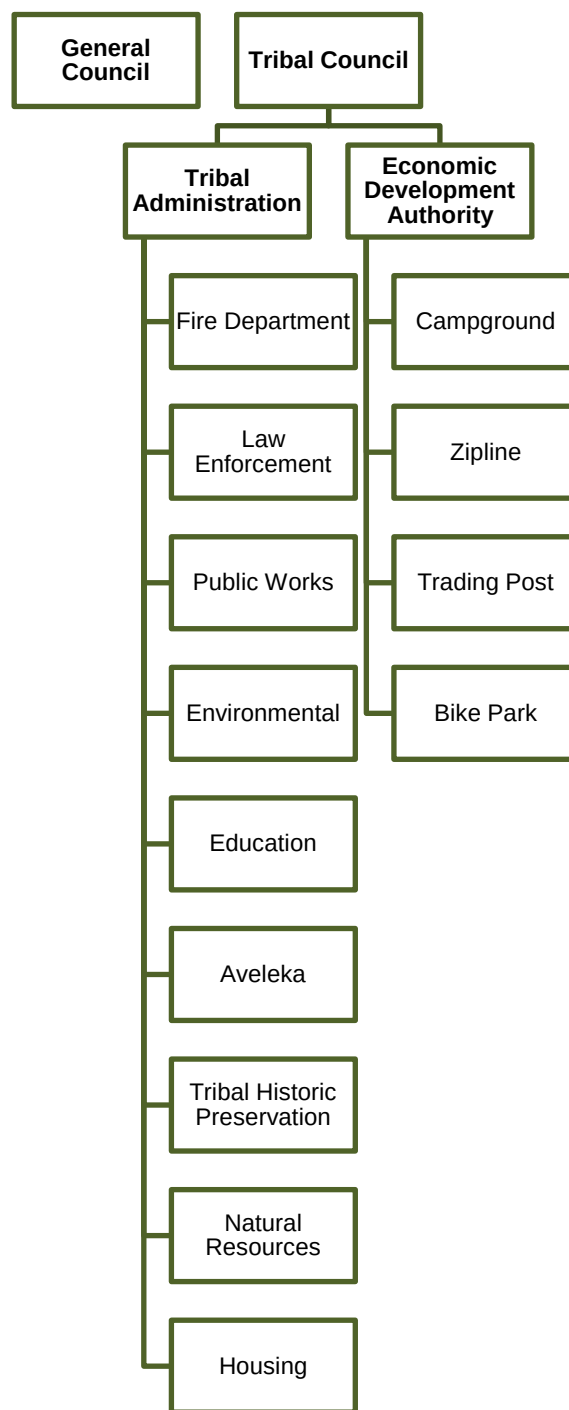


Figure 3. Organizational Chart

9.3 Staffing and Technical Support

Successful implementation of this FMP requires dedicated staff with clear responsibilities and access to specialized technical expertise. The organizational structure for Tribal governance and the Natural Resources Department are shown in Figures 3 and 4, respectively.

La Jolla Band Organization

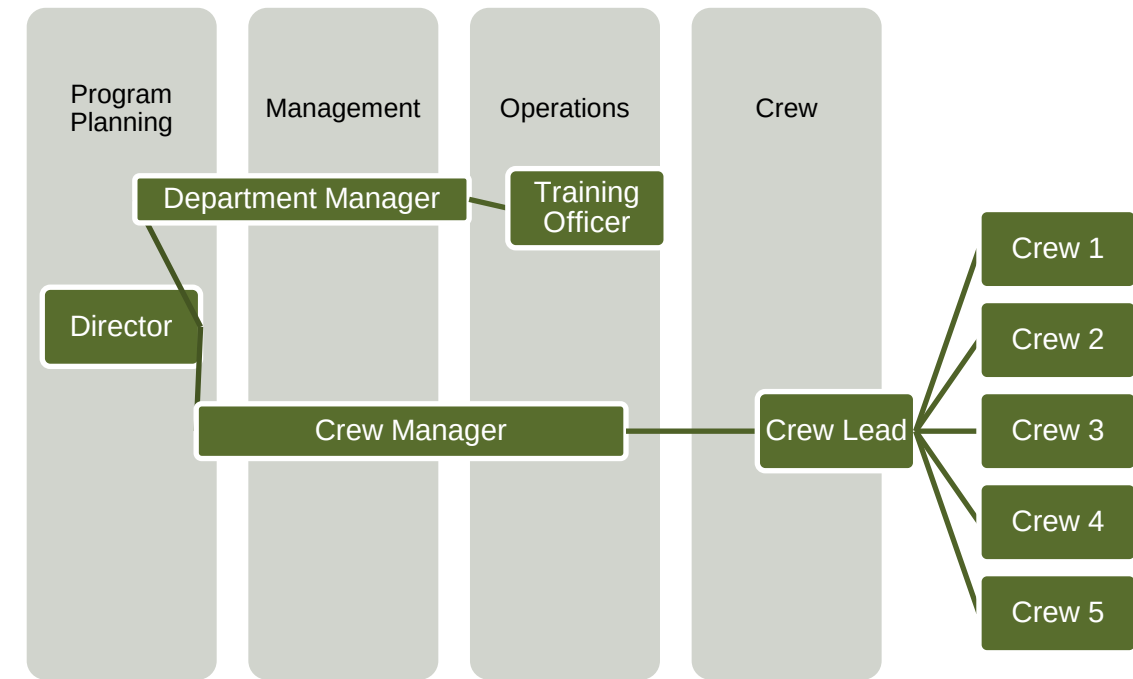


Figure 4. Natural Resources Organizational Chart

9.3.1 KEY TRIBAL REPRESENTATIVE POSITIONS

- **Environmental Director:** The Tribe’s primary representative in all forestry and environmental matters, providing program direction and reporting to the Tribal Council.
- **Fire Chief:** The Tribe’s representative in all fire and fuels management matters, reporting to the Tribal Council.
- **Natural Resources Director:** Oversees the forestry program, ensures environmental compliance, and coordinates with the Fuels Program, reporting to the Tribal Administrator.

9.3.2 TECHNICAL EXPERTISE AND SUPPORT

- **Foresters:** Technical assistance will be accessed through the BIA, USFS, and NRCS. A Registered Professional Forester (RPF) will be contracted as needed for specialized expertise.

- **Field Personnel:** The program will utilize certified **Sawyers**, licensed **Heavy Equipment Operators**, and **Forestry Technicians (I and II)** to collect field data and implement on-the-ground management activities, including brush removal, firewood processing, and fuels reduction.

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This chapter has detailed the current framework for governance, consultation, and coordination that is essential for managing the Reservation's resources. The future direction will build upon this foundation, with the formal completion and adoption of the comprehensive **Integrated Resource Management Plan (IRMP)** as the primary objective. This forthcoming plan will transition the Tribe from project-based coordination to a fully integrated, long-term strategic approach. It will formalize the collaborative processes between all Tribal departments, ensuring that management actions are guided by a single, unified vision that strengthens **Tribal sovereignty** and ensures the sustainable stewardship of the La Jolla Band's cultural and natural heritage for generations to come

10.0 SILVICULTURAL GUIDELINES

This chapter establishes the silvicultural guidelines and operational standards for all forest management activities on the La Jolla Indian Reservation. It provides the framework for developing specific, state-of-the-art prescriptions that will implement the goals of this Forest Management Plan (FMP), in accordance with BIA policy (**53 IAM 2.8.C.14**).

10.1 Silvicultural Systems and Prescriptions

Following the guidelines established in this FMP, specific silvicultural prescriptions will be developed for any project designed to harvest timber, reduce hazardous fuels, or improve forest health. All prescriptions will adhere to the content requirements outlined in federal policy (**53 IAM 9.6**).

Management Direction:

- **SILV 1:** All silvicultural prescriptions will be designed to directly support the Tribal Management Goals and Objectives outlined in Chapter 1.
- **SILV 2:** A formal, approved silvicultural prescription is mandatory for any project that will alter the character of a forest stand. This prescription must comply with BIA policy (**53 IAM Chapter 9**).
- **SILV 3:** All necessary consultation and coordination requirements will be followed for any ground-disturbing projects that may affect cultural or environmental resources.

Forest Type-Specific Strategies:

- **Productive Timber Types (VRI & MHC):** In the Valley Riparian and Mixed Hardwood-Conifer types, which exhibit positive growth, sustainable harvesting will be conducted to meet the Allowable Annual Cut (AAC) on an averaged basis.
- **Coast Live Oak Woodland (COW):** In this extensive forest type, which currently shows negative growth due to GSOB and other factors, prescriptions will focus on improving forest health through tree planting and stand improvement projects.

10.2 Operational Standards and Best Management Practices (BMPs)

All on-the-ground activities will adhere to the following standards to protect soil, water, and residual forest resources. The specific quantitative requirements for these standards are detailed in the tables referenced below.

10.2.1 FELLING AND YARDING

- **Felling Practices:** Trees will be felled to lead to tractor roads, away from watercourses, and with minimal stump heights. On steep or rocky ground (slopes >55%), techniques to reduce breakage will be considered.

- **Tractor Operations:** Spur roads and skid trails will be located to minimize erosion and damage to remaining trees. Operations are prohibited on slopes exceeding 40% without written approval, and tractors are strictly prohibited on slopes exceeding 55%.
- **Cable Yarding:** Operations will be conducted to prevent excessive damage to residual trees and vegetation. Tight lining is prohibited unless approved, and erosion control structures must be installed in cable corridors.

10.2.2 ROADS AND LANDINGS

- **Slope Stability and Erosion Control:** A geologic analysis is required for activities on slopes greater than 55%. All roads, trails, and landings will be designed and constructed to control erosion and protect water quality.
- **Landings:** Landings will not be situated in unstable areas, Stream Protection Zones, or on saturated soils. Landing size is limited to 1/4 acre and must be sloped for proper drainage.
- **Low Impact Roads:** All road construction will adhere to minimal impact standards, including maximizing use of contours, minimizing grade (generally <15%), and avoiding sensitive areas. Drainage structures will be engineered for a 100-year storm event.
- **Stream Crossings:** Crossings will be kept to an absolute minimum. Permanent crossings will utilize bridges or properly installed culverts designed for fish passage in fish-bearing streams. Temporary crossings must be removed upon project completion.
- **Cross-Drains:** Cross-drains will be installed on all temporary roads and trails to control water flow, with spacing determined by slope and soil hazard rating (**see Table 10 for specific requirements**).

Table 10. Max Distance between Cross Drainages¹ on Temporary Roads

Estimated Hazard Rating (EHR) ²	Road or Trail Gradient (in percent, %)			
	10 or less feet	11-25 feet	26-50 feet	> 50 ³ feet
Extreme	100	75	50	50
High	150	100	75	50
Moderate	200	150	100	75
Low	300	200	150	100
¹ Above spacing is to be measured on the slope. For Temporary Roads, Tractor Roads, Skid Trails, Cable Corridors, and Fire Line.				
² EHR's based on general area around road or trail, not on bare area itself.				
³ May require handwork instead of angle dozer.				

10.2.3 Winter Operations

Winter operations (Oct 15 - Apr 1) require a comprehensive plan approved by the BIA Regional Director. The Officer in Charge (OIC) retains authority for daily approvals and can shut down operations when conditions are environmentally inappropriate (e.g., saturated soils). Specific restrictions apply to mechanical harvesting, tractor use, and hauling during this period.

10.2.4 NRCS TREATMENT SPECIFICATIONS (FOR FUEL BREAKS)

- **Fuel Break Design:** Fuel breaks are designed to slow a wildfire’s spread and intensity by modifying fuel characteristics. They are strategically located on ridgelines, around structures, and along existing openings. The required minimum width is determined by slope and aspect (**Table 11**).
- **Vegetation Treatment:** Treatment involves creating horizontal and vertical separation in fuels by thinning the understory, pruning lower branches, and managing the overstory canopy. Specific standards are required for:
 - o **Horizontal Spacing:** Establishing minimum distances between individual understory shrubs, trees, and clumps of vegetation to break up fuel continuity (**Table 12**).
 - o **Vertical Separation:** Ensuring a safe distance between the top of the understory vegetation and the base of the overstory tree crowns (**Table 12**).
 - o **Pruning:** Removing the lower branches of overstory trees to a specified maximum height to eliminate ladder fuels (**Table 13**).
 - o **Overstory Canopy:** Managing the density of the overstory by adhering to a maximum recommended crown closure percentage, which varies by slope and aspect (**Table 14**).
- **Slash Treatment:** Debris from thinning and pruning will be treated within four months by methods such as hauling, masticating, chipping, or prescribed burning, in accordance with NRCS codes.
- **Wildlife Habitat:** Fuel break design will incorporate measures to support wildlife, such as retaining snags under 20 feet, leaving large logs, and maintaining islands of preferred browse species.

Table 11. Minimum fuel break width

Slope (%)	North Aspect	East Aspect	West Aspect	South Aspect
0 - 10%	150	150	150	150
11 - 20%	150	150	150	150
21 - 30%	150	150	175	200
31 - 40%	150	175	225	250
41 - 50%	225	225	275	300
> 60%	330	330	330	330

2111 Table 12. Minimum Distance Between Understory Plants

Distance Between Foliage of Shrub Species (horizontal distance in feet between driplines*)						
Width of Foliage of Understory Shrubs	25	6	9	13	17	
Minimum Distance Between Individual Understory Shrubs	5	11	14	17	19	
Distance Between Boles of Understory Trees (horizontal distance measured from center of bole)						
Minimum Distance Between Tree Boles	Diameter of Tree (D, converted to feet) + 10 feet					
Distance Between the Dripline of Clumps of Understory Trees and/or Shrubs (slope dependent)						
	Width of Clumps (feet)					
	10	20	30	40	50	60
Slope	Distance Between Clumps (feet) Based on Slope Steepness (left column) and Clump Width (above)					
0%	15	19	27	34	40	46
20%	17	30	38	45	50	54
40%	20	38	53	65	75	83
60+%	25	48	68	85	100	113

2112 *The “dripline” of a shrub or tree is the farthest edge of the plant foliage from which moisture can drip to the
 2113 ground surface

2114 OR where there is =>50% overstory tree cover, remove all shrubs over 3 feet tall, retaining sapling- and pole-
 2115 sized trees.

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2118

CHAPTER 11: FOREST DEVELOPMENT PROGRAM

11.1 Program Framework and Guiding Policies

Forest Development on the La Jolla Indian Reservation encompasses all management activities aimed at improving the long-term health, resilience, and sustainable productivity of Tribal forestlands. As defined in federal regulations (**25 CFR §163.32**), this program focuses on proactive, on-the-ground projects, primarily reforestation and timber stand improvement, that align with the Tribe's cultural and ecological goals.

All forest development projects described in this chapter will adhere to federal policies and procedures governing these activities (**53 IAM Chapter 5**). A formal silvicultural prescription is required prior to the implementation of any project (**53 IAM 5.5(C)**), and all scheduled activities will be detailed in accordance with BIA planning requirements (**53 IAM 2.8.C.18**). Funding applications for proposed projects will be supported by a Benefit-Cost Analysis, as required by the BIA Pacific Regional Office.

Management Direction:

- **FOREST DEVELOPMENT 1:** Projects will be developed to thin portions of the General and Residential Forest/Woodland zones to improve the health, vigor, and fire resilience of residual trees.
- **FOREST DEVELOPMENT 2:** A plan will be developed for understory thinning and reduction of dead fuels to enable the use of prescribed fire as a management tool.

11.2 Strategic Initiatives

The following strategic initiatives and associated action items will guide the Forest Development Program over the planning period.

11.2.1 REFORESTATION AND STAND IMPROVEMENT

Based on the forest inventory, several areas require active management to improve stocking and health. The program will prioritize the following needs:

- **Hazard Fuel Reduction:** Implement thinning and fuel break maintenance in the Residential Forest zone (210 acres).
- **Coast Live Oak Reforestation:** Develop and implement reforestation projects in understocked areas of the Coast Live Oak type (150 acres) to combat decline from fire and insect damage.
- **Engelmann Oak Reforestation:** Develop and implement reforestation projects to enhance the stocking of the rare Engelmann Oak (75 acres).

For conifer planting, seedlings will be sourced from appropriate seed zones (primarily zone 998). A standard 12' x 12' spacing (approx. 300 trees per acre) is recommended, with site preparation to reduce competition.

11.2.2 TRIBAL FOREST PROTECTION ACT (TFPA) COLLABORATION

The Tribal Forest Protection Act of 2004 authorizes the Tribe to enter into agreements with federal agencies to treat hazardous fuels and address forest health on adjacent federal lands.

- **Management Direction - TFPA 1:** The Tribe will proactively engage with the U.S. Forest Service and other adjacent federal and state landowners to develop collaborative, cross-boundary projects under the authority of the TFPA.

11.2.3 TIMBER/WOODLAND IMPLEMENTATION PLAN

The following six action items translate the FMP's goals into scheduled projects, consistent with the BIA's trust responsibility and the Tribe's objectives. Each item follows a standard process: **1) Develop Prescription, 2) Conduct Environmental Review (NEPA), 3) Secure Funding, 4) Implement Project, and 5) Monitor Results.**

1. **Enhance Fire Preparedness:** Create defensible space in residential and watershed protection zones to improve firefighter safety and protect structures.
2. **Improve Native Surface Roads:** Inventory road conditions and prioritize maintenance or decommissioning to ensure passability and reduce erosion into streams.
3. **Control and Mitigate GSOB Damage:** Work with the USFS State and Private Forestry Entomologist to assess the Goldspotted Oak Borer infestation and implement Best Management Practices (BMPs).
4. **Address Forest Overstocking:** Collaborate with agency partners (BIA, NRCS) to identify and treat overstocked stands to improve overall forest health and reduce competition.
5. **Replant Understocked Coast Live Oak:** Conduct stocking surveys in the COW forest type and implement replanting projects to counter volume loss.
6. **Replant Understocked Engelmann Oak:** Conduct stocking surveys and implement replanting projects to supplement the population of this rare and culturally significant species.

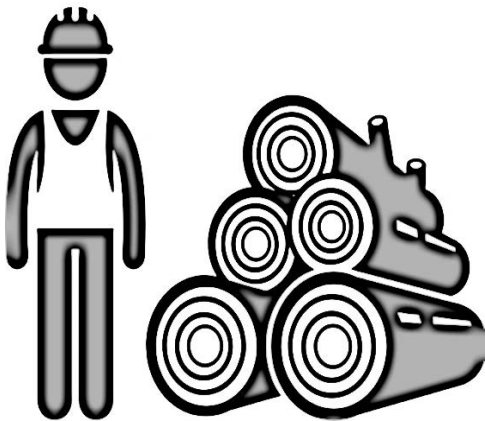
11.3 Implementation Schedule

The following table outlines a projected work schedule for key Forest Development activities for the 2025-2026 fiscal years. This schedule is a dynamic guide and will be updated annually based on secured funding, staffing, and evolving Tribal priorities.

Table 13. Forestry Program Work Schedule (FY 2025-2026)

Activity	Lead/Partners	Q1 2025	Q2 2025	Q3 2025	Q4 2025	Q1 2026	Q2 2026
Defensible Space Planning	NRD/Fire/BIA	X	X				
GSOB Infestation Assessment	NRD/USFS	X			X	X	
Road Condition Inventory	NRD/Public Works		X	X			

Implement GSOB BMPs	NRD Crew	X	X	X	X	X	X
Develop Replanting Guides	NRD/BIA/NRCS			X			
Secure Grant Funding	NRD/Admin	X	X	X	X	X	X
Implement Thinning Projects	NRD Crew			X	X		
Implement Planting Projects	NRD Crew				X	X	
Monitor Project Results	NRD				X		X



12.0 HARVEST PLANNING AND SCHEDULING

The Challenge with Coast Oak Woodland (COW) Stands

No sustainable harvest level (IAC) can currently be calculated for the Coast Oak Woodland (COW) forest type due to its negative growth rate (-9.4 MCF or -118 cords of hardwood firewood per year). This poses a significant challenge for sustainable firewood production, as firewood harvesting is most practical in these stands. Near-term wood removal from COW stands will likely be limited to biomass salvage operations, such as the removal of trees affected by the Goldspotted Oak Borer (GSOB). Planned silvicultural treatments for COW stands include planting native species and potentially thinning overcrowded areas to improve future growth conditions.

12.1 Annual Allowable Cut (AAC)

The Annual Allowable Cut (AAC) is the maximum sustainable harvest level permitted during this FMP's planning period. The AAC is determined by the Tribe's preferred management alternative, which, in alignment with the Tribal Goal of **Ecosystem Health and Resilience**, prioritizes long-term forest health over short-term commercial gain. While the annual harvest may fluctuate, the total volume harvested over the planning period cannot exceed the cumulative allowable cut (**53 IAM 2.8.C.15**).

2199 Based on positive annual growth in the VRI (46 cords/year) and MHC (18 cords/year) forest types, the
2200 combined sustainable growth is 64 cords per year. However, due to current land management constraints
2201 (e.g., zoning, stream protection, access), the AAC is conservatively set at **10% of annual growth**,
2202 which is **6.4 cords per year**.

2203 The Coast Oak Woodland (COW) type currently has a negative growth rate (-118 cords/year), so no
2204 sustainable harvest can be calculated. Wood removal from COW stands will be limited to biomass
2205 salvage operations.

2206 **Area for Expansion: Long-Term AAC Strategy** A future objective for the Natural Resources
2207 Department should be to develop a long-term strategy to systematically address the constraints that
2208 currently limit the AAC. This could include targeted road improvements, thinning projects to improve
2209 access, and restoration efforts that could eventually allow for an increased sustainable harvest to meet
2210 Tribal needs.

2211 **Calculating the Annual Allowable Cut (AAC)**

2212 Despite the positive annual growth in the VRI and MHC types, the Annual Allowable Cut (AAC) is
2213 estimated at only 10% of the annual growth due to several land management constraints outlined
2214 elsewhere in the plan, including:

- 2215 • Land use zoning restrictions
- 2216 • Stream protection guidelines
- 2217 • Access limitations

2218 Based on this 10% calculation:

- 2219 • **VRI AAC:** 370 cubic feet (6.4 cords).
- 2220 • **MHC AAC:** 140 cubic feet (1.8 cords).

2221

2222 **12.2 Harvest Policy**

2223 To achieve the Tribal Goals of Sustainable Operations and Protection and Community and Economic
2224 Prosperity, all harvesting activities on the Reservation will comply with this FMP, Tribal ordinances,
2225 and the following policies, as mandated by 53 IAM Chapter 3:

- 2226 • **Sale Parameters:** Guidelines will govern sale size, volume, value, and duration.
- 2227 • **Harvest Unit Management:** Prescriptions will define the size, shape, and location of harvest units
2228 to protect sensitive areas.
- 2229 • **Special Resource Protection:** Explicit protocols will protect riparian areas, cultural sites, and
2230 sensitive habitats.
- 2231 • **Tribal Preferences:** Preferences for Tribal members and enterprises in contracting will be
2232 applied.

2233 **Absence of a Periodic Regulated Harvest Schedule**

2234 This Forest Management Plan (FMP) does not include a specific periodic, regulated harvest schedule.
2235 This is primarily because the Reservation is not currently positioned for cost-effective commercial
2236 timber harvesting. To date, no commercial harvesting has occurred, and the Band considers available
2237 sustainable wood products a non-commercial resource at this time.

2238 **Annual Growth Rates of VRI and MHC Stands**

2239 Inventory data indicates positive annual growth in the other two forest types:

- 2240 • **VRI Forest Type:** 3,700 cubic feet (46 cords).
- 2241 • **MHC Forest Type:** 1,400 cubic feet (18 cords).

2242 This results in a combined annual growth of 5,100 cubic feet (5.1 MCF) or 64 cords across these two
2243 forest types.

2244 **Summary**

2245 While the VRI and MHC forest types exhibit positive growth, the sustainable harvest (AAC) is
2246 significantly constrained by various land management limitations. The COW forest type currently has a
2247 negative growth rate, precluding sustainable timber harvesting in the short term. However, biomass
2248 salvage of dead and dying trees remains a crucial active forest management strategy in these stands.

2249 **12.3 Harvest Policy – Permit and Contract Harvests**

2250 Harvest policy will detail timber sale objectives and those practices considered acceptable on the Reservation to
2251 comply with the FMP and Tribal ordinances and standards. The FMP should include but not be limited to the harvest
2252 policies concerning: sale size, volume, value, and duration; harvest unit size, shape, location or other constraints;
2253 product size and merchantability standards; -market area and solicitation policy; access right-of-way, location of
2254 construction, maintenance specifications, road closures; felling and bucking standards; utilization standards;
2255 yarding methods and restrictions; hauling policies, safety and routing; slash disposal standards; scaling methods;
2256 payment policies for harvest of forest products; regeneration or thinning policies; mapping standards; special
2257 resource protection; required documentation; -permit program policies; post-harvest analysis, and Indian and/or
2258 Tribal preferences in contracting and its specifications or limitations. (53 IAM 3)

2259 **Free Use Permits up to \$5,000 in Value.**

2260 Let's thoroughly revise and expand upon this section to provide a comprehensive overview of the La
2261 Jolla Indian Reservation's harvest policy, free-use permitting system, and the procedures for both
2262 permitted and contractual timber harvests, ensuring clarity, compliance with federal regulations, and
2263 alignment with Tribal ordinances and standards.

2264 **Harvest Policy: Guiding Principles and Operational Standards**

2265 The La Jolla Indian Reservation's harvest policy serves as a foundational document that meticulously
2266 outlines the objectives governing any timber sales or harvesting activities and delineates the specific
2267 practices deemed acceptable on Reservation lands. This policy is designed to ensure strict compliance

with this Forest Management Plan (FMP), relevant Tribal ordinances, and established environmental and cultural resource protection standards. As mandated by 53 IAM 3, the FMP incorporates, but is not limited to, the following critical elements within its harvest policies:

- **Sale Parameters:** Detailed specifications regarding sale size (acreage and timber volume), estimated value, and the allowable duration of any harvest operations.
- **Harvest Unit Management:** Precise guidelines concerning the size, shape, and location of designated harvest units, along with any additional constraints aimed at minimizing environmental impact and protecting sensitive areas.
- **Product Standards:** Clear definitions of product size and merchantability standards, ensuring that any harvested material meets specified quality and utilization criteria.
- **Market Area and Solicitation:** Policies outlining the potential market area for any timber sales and the procedures for soliciting bids or proposals, ensuring fair and transparent processes.
- **Access and Infrastructure:** Regulations governing access rights-of-way, including the location, construction specifications, and maintenance requirements for any necessary roads, as well as protocols for road closures and reclamation.
- **Felling and Bucking Standards:** Specific standards for tree felling techniques and bucking (cutting logs into shorter lengths) to maximize utilization and minimize damage to residual vegetation and the environment.
- **Utilization Standards:** Requirements for the efficient utilization of harvested timber, minimizing waste and ensuring that the maximum usable volume is extracted.
- **Yarding Methods and Restrictions:** Detailed specifications regarding acceptable yarding (moving logs from the stump to a landing) methods, along with any restrictions to protect soil, water resources, and sensitive habitats.
- **Hauling Policies:** Regulations governing the transportation of harvested timber, including safety protocols, designated hauling routes, and weight restrictions to minimize road damage and ensure public safety.
- **Slash Disposal Standards:** Comprehensive standards for the treatment and disposal of logging slash (residual debris) to reduce fire hazards, promote regeneration, and maintain aesthetic values.
- **Scaling Methods:** Clear procedures for accurately measuring the volume of harvested timber to ensure fair payment and effective inventory management.
- **Payment Policies:** Detailed policies outlining the terms and methods of payment for harvested forest products, ensuring timely and accurate compensation.
- **Regeneration and Thinning Policies:** Specific guidelines for post-harvest regeneration (re-establishment of tree cover) and thinning (selective removal of trees to improve growth and health of the remaining stand) to ensure long-term forest sustainability.
- **Mapping Standards:** Requirements for accurate mapping of harvest units, access roads, and other relevant features to facilitate effective planning, monitoring, and record-keeping.
- **Special Resource Protection:** Explicit measures and protocols for the protection of sensitive resources, including riparian areas, wetlands, cultural sites, and habitats of threatened or endangered species.
- **Required Documentation:** A comprehensive list of all necessary permits, environmental assessments, contracts, and other documentation required for any harvesting activities.
- **Permit Program Policies:** Detailed policies governing the issuance and management of permits for various types of forest product harvesting.

- **Post-Harvest Analysis:** Procedures for evaluating the outcomes of harvesting operations, including assessments of regeneration success, environmental impacts, and compliance with policy objectives.
- **Indian and/or Tribal Preferences:** Explicit policies outlining preferences for Indian and/or Tribal members and enterprises in contracting for forestry-related activities, along with specific requirements and limitations in accordance with relevant federal and Tribal laws.

Free Use Permits: Supporting Tribal Member Access

In accordance with 53 IAM Chapter 4, Tribal members are entitled to harvest forest products valued at less than \$5,000 per year for their personal use by obtaining a **Free Use Permit** from the Tribal Administration. This provision recognizes the inherent right of Tribal members to access and utilize the resources of their ancestral lands for traditional and domestic purposes. As detailed in the Tribal Laws, Ordinances, and Standards section (referenced elsewhere), these free-use permits may authorize the harvest of various forest products, including:

- Posts and poles for fencing and construction.
- Firewood (both living and dead trees) for heating and cooking.
- Acorns and medicinal herbs for traditional uses.
- Basket weaving materials for cultural practices.

Once a free-use permit is duly issued by the Tribal administration, the permitted Band member is authorized to re-sell the harvested products without requiring further permitting, provided the total value of harvested and re-sold products remains within the \$5,000 annual limit. This provision can provide a modest economic opportunity for Tribal members while still adhering to sustainable harvesting practices.

Paid Permit Harvest: Limited Commercial Opportunities for Tribal Members

Pertinent policies governing contractual or permitted harvest are summarized below, and a thorough review is strongly advised should such actions ever be considered in the future:

For the harvest of timber with a stumpage value between \$0 and \$25,000 by individual Indians on Trust land, a **Paid Permit** issued by the Bureau of Indian Affairs (BIA) is required. These permitted sales must be consistent with the regulations outlined in 53 IAM Chapter 4, specifically sections 53 IAM 4.5(A) and (B), and must utilize forms approved by the BIA. Notably, permitted sales necessitate the preparation of "environmental analysis and other studies as necessary" to ensure compliance with all applicable laws and regulations designed to protect and enhance environmental and cultural resources. This underscores the commitment to responsible resource management even for smaller-scale commercial activities.

Contractual Harvest: For Larger-Scale Forest Product Removal

Any harvest of timber exceeding \$25,000 in stumpage value requires a formal **Timber Sale Contract** and must strictly adhere to the requirements stipulated in 53 IAM Chapter 3, particularly sections 53 IAM 3.5(A) and 53 IAM 3.5(B), as well as the guidance provided in the Indian Forest Management

Handbook, Volume 3, Contract Sales of Forest Products. Contractual timber sales necessitate the preparation of a comprehensive Forest Officer's Report, thorough NEPA documentation (such as an Environmental Assessment or Environmental Impact Statement), and must utilize BIA-approved contract forms. It is important to note that certain types of projects, as outlined in Part 516 of the DOI Department Manual, may be categorically excluded from certain NEPA requirements, streamlining the process for specific low-impact activities. The specific manual chapters and handbooks referenced herein, which provide detailed guidance on both permitted and contractual timber sales, are readily accessible online at <https://www.bia.gov/policy-forms/manual>.

This detailed framework of harvest policies, free-use provisions, and procedures for permitted and contractual harvests ensures a structured and compliant approach to the utilization of the La Jolla Indian Reservation's forest resources, balancing the needs of Tribal members, the imperative of environmental and cultural resource protection, and the potential for limited economic opportunities derived from sustainable salvage operations

12.4 Future Forest Product Sales

Future forest product sales will be identified and mapped to satisfy the AAC for the entire operational management period. The specifications of sales will comply with FMP or IRMP management objectives. Market buffers (deviations in the AAC from year to year) will be identified for optimum harvest in times of good markets and minimum harvest during poor markets. Consideration for sustained Tribal employment goals which are identified in the IRMP should be addressed here.

Scheduled sales will have specific detail on required information. Activities will be progressively more tentative as the sale date extends into the future. The harvest schedule should be reviewed and updated to perpetuate a continuous strategy. During a normal operational planning period (15 years) sale detail should be as follows: Year Designation Specified Information 1-2 Scheduled sales Final map layout Volume by species and areas Development requirements Special resource protection identified Harvest systems Harvest timing 3-5 Planned sales Proposed map layout Total volume Primary access identified Special resources identified Proposed harvest systems 6-15 Projected sales General map areas Planned volume Existing access identified. (53 IAM 2.8.C.17)

Exploring Revenue Streams from Salvaged Wood

The La Jolla Indian Reservation is actively exploring the potential for future forest product sales derived from salvaged wood as a means of generating revenue. It is crucial to understand that the Tribe's forests are classified as non-commercial, reflecting a management philosophy that prioritizes ecological health, cultural values, and the provision of resources for tribal members over large-scale timber extraction. Consequently, no viable, healthy trees will be felled for commercial purposes. Historically, the primary use of trees harvested by Tribal members has been for firewood, fulfilling essential domestic needs.

Several factors further constrain the potential for traditional commercial timber harvesting:

- **Limited Conifer Market:** While the MHC forest type contains a significant volume of conifer species, predominantly big cone Douglas-fir, the absence of a nearby lumber mill capable of processing these trees into marketable lumber renders commercial sale economically unfeasible at present. The transportation costs to distant mills would likely negate any potential profit.
- **Challenging Terrain:** The rugged topography characteristic of the MHC forest type presents significant operational hurdles for any potential harvesting activities. Extensive and costly road improvements would be necessary to facilitate access for logging equipment and the

transportation of harvested material, further diminishing the economic viability of commercial operations in this area.

- **Riparian Protection Priorities:** The VRI forest type is strategically prioritized for the protection of vital riparian areas and stream ecosystems. Any limited harvesting activities within or adjacent to this zone would necessitate strict adherence to riparian buffer regulations to safeguard water quality, aquatic habitats, and overall ecosystem integrity. This constraint further limits the potential volume and methods of any wood removal from this sensitive area.

Focus on Salvage Operations and Forest Health

Given these limitations, the immediate focus of forestry operations in the current year (2025) is strategically directed towards the removal of dead and dying trees. While commercial-scale firewood harvesting could theoretically be operationally feasible, it is not currently cost-effective due to the need for initial investments in equipment and workforce development.

The Tribe is actively engaged in salvage operations, particularly targeting coast live oak stands experiencing high levels of mortality due to drought and GSOB infestation. These critical salvage efforts are being supported by grant funding, underscoring the dual objectives of reducing hazardous dead and infested trees, thereby mitigating fire risk and further pest spread, and preparing damaged areas for reforestation initiatives. It is important to note that all revenue generated from the sale of these salvaged wood products will be directly reinvested to support the La Jolla Tribe and/or future forestry activities, reinforcing the non-commercial ethos of the forest management.

Formalizing Potential Harvest Volumes for Tribal Use and Forest Health Treatments

While large-scale commercial sales of healthy timber are not envisioned, this Forest Management Plan (FMP) formally outlines potential harvest volumes to facilitate low-intensity harvesting activities by the Band and its members. This framework supports two key objectives:

- **Domestic Use by Tribal Members:** Band members will be authorized to harvest firewood and other wood products for their personal domestic needs, ensuring access to essential resources.
- **Implementation of Forest Health and Fuel Management Projects:** The outlined harvest volumes will also enable the Tribe to undertake crucial forest management projects. These include the creation of fuel management zones around residential and cultural areas to enhance community safety from wildfire, as well as broader treatments aimed at improving overall forest health and resilience.

Therefore, the estimated Annual Allowable Cut (AAC), as discussed in previous sections, can be readily achieved through Tribal authorization of permitted free-use firewood harvesting by its members and through the utilization of wood generated from Tribal-led forest health and fuel reduction projects. The Band will maintain comprehensive records of all authorized harvests, including permitted free use and wood derived from Tribal projects, as well as any incidental harvest that is processed into usable material such as firewood. This meticulous record-keeping will ensure accountability and provide valuable data for future forest management planning and monitoring.

Chapter 13: Data Collection, Records, and Forest History

13.1 DATA COLLECTION

Reservation specific data collected through forest inventory is essential to the Secretary's monitoring of federal trust obligations. Sufficient forest inventory data must be collected to provide accurate estimates of stocking and growth on the commercial forest for each Reservation and for each major forest type or unit where a Reservation has been subdivided. These estimates will be used for determination and regulation of allowable cuts and for other land use planning objectives. Sufficient data will also need to be collected in order to comply with various Federal statutes and regulations. Data on the description of affected environment and the cumulative effects must be collected to meet NEPA requirements. Data on the various endangered species in the area and the determination of the effect of any management alternative is required under the ESA. Data on the impact of the management alternatives to cultural and historical sites under the NHPA. (53 IAM 2.8.C.19)

13.1 Forest Inventory Data

Accurate and comprehensive forest inventory data, specific to the La Jolla Indian Reservation, is not merely a desirable asset but an **essential prerequisite** for the Secretary of the Interior to effectively monitor and uphold federal trust obligations concerning the Tribe's natural resources. This data serves as the bedrock upon which sound forest management decisions are built, ensuring the long-term health, productivity, and cultural significance of the Reservation's forests.

As mandated by 53 IAM 2.8.C.19, sufficient forest inventory data must be diligently collected to provide precise estimates of both stocking levels (the volume of standing timber) and growth rates on all commercial forest lands within the Reservation. Furthermore, this data collection must extend to each major forest type or management unit, particularly in cases where the Reservation has been subdivided for more nuanced management.

These detailed estimates are fundamental for several critical purposes:

- **Determination and Regulation of Allowable Cuts:** Accurate growth and stocking data are the cornerstone of sustainable forestry. They enable the Tribe and the Bureau of Indian Affairs (BIA) to determine the Annual Allowable Cut (AAC) and Indicated Allowable Cut (IAC) in a manner that ensures long-term forest health and avoids overharvesting. This data informs responsible harvesting practices, whether for economic development (as currently being explored through salvage operations) or for future traditional uses like firewood provision.
- **Land Use Planning Objectives:** Beyond timber management, comprehensive forest inventory data is vital for broader land use planning initiatives. It provides critical insights into forest composition, structure, and health, informing decisions related to wildlife habitat management, watershed protection, fire risk assessment and mitigation, and the preservation of culturally significant areas.
- **Compliance with Federal Statutes and Regulations:** The collection of sufficient forest inventory data is also crucial for adhering to a multitude of federal environmental and cultural resource protection laws. These include, but are not limited to:
 - **National Environmental Policy Act (NEPA):** NEPA requires a thorough understanding of the affected environment and the assessment of the cumulative effects of any proposed management actions. Detailed forest inventory data, encompassing ecological conditions,

- species distribution, and overall forest health, is essential for preparing legally defensible Environmental Assessments (EAs) or Environmental Impact Statements (EISs).
- o **Endangered Species Act (ESA):** The ESA mandates the identification of any threatened or endangered species present within the management area and a thorough determination of how proposed management alternatives might affect these species or their critical habitats. Forest inventory data must include information on the presence, distribution, and habitat requirements of listed species.
 - o **National Historic Preservation Act (NHPA):** The NHPA requires consideration of the impact of management alternatives on cultural and historical sites. Forest inventory efforts may need to incorporate data related to the location and characteristics of such sites within the forest landscape to ensure their protection.

Maintaining Current Data Through Periodic Re-inventory

To ensure the accuracy and relevance of growth estimates and to continuously meet evolving forestry requirements, the La Jolla Indian Reservation's forests must undergo periodic re-inventory. The need for a new inventory should be proactively evaluated whenever significant changes are made to this Forest Management Plan (FMP), reflecting new management objectives or strategies. At a minimum, a comprehensive re-inventory should be conducted at least every 15 years, serving as a crucial benchmark for assessing forest changes over time.

The Tribal Council will play a central role in this process, designating a coordinator responsible for assessing the need for and scheduling new forest inventories. This ensures that the Tribe maintains control over the data collection process and that inventories are conducted in a timely and effective manner.

Long-Term Data Management and Accessibility

Maintaining meticulous records of all forest inventories is paramount. These records will be systematically incorporated into the current and subsequent iterations of the Forest Management Plan (FMP), creating a historical archive of forest conditions and management activities. These FMPs, along with the underlying inventory data, will be held indefinitely by the Band, ensuring long-term access to this critical information for future planning and decision-making.

Furthermore, the Band will be responsible for maintaining comprehensive data related to the description of the affected environment and the cumulative effects of forest management practices. This ongoing data management will support future NEPA compliance efforts. Similarly, the Band will diligently maintain records of all ESA management alternative effects determinations, ensuring transparency and accountability in the protection of endangered species. Finally, detailed data concerning the impact of management alternatives on cultural and historic sites will be meticulously documented and preserved to comply with the NHPA and to safeguard the Tribe's cultural heritage.

In conclusion, the systematic and ongoing collection, analysis, and management of comprehensive forest inventory data are fundamental to the La Jolla Indian Reservation's ability to exercise its sovereignty over its forest resources, fulfill federal trust obligations, comply with crucial federal statutes, and make informed decisions that ensure the long-term ecological, economic, and cultural well-being of its forests.

This data is not just a collection of numbers; it is the foundation for responsible stewardship and the realization of the Tribe's vision for its ancestral lands.

13.2 Harvest Records

Another component of a detailed forest history is harvesting records. This part should specify the monitoring process and record keeping requirements for the timber management program. Acceptable forms or other means of documentation should be exemplified with routing, verification, audit, approval, distribution, filing and archival retention procedures included. Regional, Agency and Tribal handbooks and instructions should be referenced as appropriate. (53 IAM 2.8.C.21)

Forest Classification, Historical Context, and Current Forest Health

The La Jolla Indian Reservation is classified as a Class 4 forest. This classification, common among trust lands in Southern California, typically implies a non-commercial designation, resulting in a lack of historical timber harvest records. Unlike forests managed for timber production, coast oak woodlands, which characterize much of the Reservation, are not traditionally developed for their economic timber value.

However, the current state of these forests is significantly influenced by a unique historical context. Over the past two centuries, the cessation of traditional cultural burning practices, coupled with a century of prevailing national forest policy focused on fire suppression, has inadvertently contributed to a decline in the overall health of the region's forests and an increase in tree mortality. Cultural burning, a practice integral to indigenous land management for millennia, played a crucial role in maintaining open woodlands, reducing fuel loads, promoting biodiversity, and enhancing forest resilience. The suppression of these practices has led to denser understories, increased competition for resources, and a higher susceptibility to stressors like drought and insect infestations.

The consequences of this historical shift are evident in the current poor health of the Reservation's forests and the elevated levels of tree mortality observed. This mortality is exacerbated by factors such as prolonged drought conditions and the infestation of the Goldspotted Oak Borer (GSOB), a destructive invasive insect that has significantly impacted oak populations in Southern California.

Short-Term Economic Opportunities Through Forest Health Initiatives

In the interim period, as the Reservation works towards restoring the health of its forests, the biomass salvaged from necessary forest management activities presents a valuable opportunity for economic development. The removal of defective trees weakened or killed by drought, GSOB, and those targeted for removal as part of forest health thinning prescriptions will yield a substantial amount of usable wood. This salvaged biomass can be utilized in various ways to support the local economy, such as the production of firewood, bioenergy feedstock, or other wood-based products. This approach allows the Reservation to derive economic benefit from the necessary forest health treatments while simultaneously reducing hazardous fuel loads and improving overall forest conditions. This sustainable utilization of salvaged material will be crucial in bridging the gap until the forests regain their natural resilience and tree mortality returns to nominal levels.

Long-Term Vision: Sustainable Wood for Tribal Use

Looking towards the future, the long-term vision for forest resource utilization on the La Jolla Indian Reservation centers on providing a sustainable source of clean, burnable wood for Tribal members and visitors. Once the health of the Reservation's forests is restored through ongoing management efforts, including potential reintroduction of beneficial fire regimes (where appropriate and safe), any harvesting activities will be primarily focused on meeting the domestic needs of the Tribal community. This approach prioritizes the cultural and practical value of firewood for heating, cooking, and ceremonial purposes, aligning with the Tribe's stewardship values and commitment to the long-term health and sustainability of their forest resources. The emphasis will shift from economic exploitation to ecological health and community benefit, ensuring that the forests continue to provide essential resources and ecological services for generations to come.

13.3 Forest History

Forest History Requirements

Under 25 USC 3103(4)(B) and 25 CFR 163.1, a Forest History is required for Forest Management Plan (FMP) preparation (mandatory for Category 1 Reservations, optional for others per 53 IAM 2.8.B). The document's length and detail depend on whether it's an initial history or an update.

The Forest History section of the FMP must document past forest management, including events like fire, insects and disease, harvest practices, trespass, land acquisitions, Tribal forestry enterprise changes, price variations, FMP modifications, and other significant impacts. At a minimum, it must document harvest volume and value (53 IAM 2.8.C.20).

Initial Forest History documents often divide the chronology into logical periods (e.g., pre-settlement, reservation establishment, forestry program inception, IRA era, post-WWII, federal termination, intensive management, PL 93-638).

Area for Expansion: Forest Health Monitoring Plan To build upon the baseline inventory data, the Tribe should develop a long-term **Forest Health Monitoring Plan**. This plan would establish permanent plots and protocols to track key indicators over time, such as GSOB spread, regeneration success after planting, water quality, and the abundance of traditional plants. This provides the data needed for true adaptive management

The usefulness of the Forest History can be enhanced by including (as text or appendices):

- A photographic record of Reservation forest management activities.
- Details of all forest development/timber stand improvement work (acres treated annually, methods, organizational details, funding sources and amounts by year).
- An appendix of current forms (timber sales, permits, inspection reports, etc.).
- Copies of the Reservation's treaty and other key federal and Tribal legal/policy documents.
- A list of all timber sales (name, acres, sale date, volumes and values at sale and cut, purchaser, or completion forms). (53 IAM 2.8.C.20)

A comprehensive Forest History is foundational to the La Jolla Indian Reservation's Forest Management Plan (FMP), as mandated by 25 USC § 3103(4)(B) and 25 CFR § 163.1. While 53 IAM 2.8.B indicates a

Forest History is mandatory only for Category 1 Reservations with significant commercial timber resources, its inclusion is highly valuable for the La Jolla Indian Reservation, especially given the recent establishment of its forestry program. This history will serve as a vital repository, documenting the intricate tapestry of past forest management practices, significant ecological and human-induced events, and the evolving socio-economic landscape that has sculpted the present state of the Reservation's woodlands. The depth and breadth of this document will naturally be tailored to whether it represents an initial compilation or an update; given the new forestry program on the La Jolla Reservation, this initial section summarizes the forest history and outlines a plan for its ongoing enhancement.

Essential Elements of the Forest History:

To establish a robust foundation for informed forest management decisions, the FMP's Forest History section will meticulously detail past forest stewardship and critical events, including:

- **Fire History:** A thorough account of past wildfires, detailing their frequency, spatial extent, intensity, and ecological consequences on forest structure and species composition. This should also integrate traditional ecological knowledge from Tribal Elders regarding historical fire regimes and any past cultural burning practices that could inform contemporary management.
- **Insect and Disease Outbreaks:** Comprehensive documentation of significant historical infestations of insects (crucially including the ongoing Goldspotted Oak Borer impact) and outbreaks of tree diseases, meticulously outlining their effects on tree mortality rates, growth patterns, and shifts in species dominance within the forest.
- **Harvest Practices:** A detailed narrative of past timber harvesting activities, specifying the tree species targeted, total volumes removed, harvesting methods, and the intended uses, ranging from traditional domestic purposes to potential commercial sales and salvage operations.
- **Trespass:** A record of any documented instances of unauthorized timber harvesting, illegal logging, or other forms of trespass that have impacted the Reservation's forest resources.
- **Land Acquisitions and Transfers:** Precise information regarding any historical land acquisitions, transfers, or boundary adjustments that have altered the Reservation's forest land base and its management context.
- **Tribal Forestry Enterprise Evolution:** A chronological account of the formation and any significant organizational changes within Tribal forestry enterprises or natural resource management structures that have influenced forest management strategies.
- **Economic Factors:** An analysis of historical timber price variations and price-setting procedures, exploring their influence on past management decisions, economic opportunities, and the viability of forestry activities.
- **FMP Modifications:** A meticulous record of any previous modifications, amendments, or revisions to the Forest Management Plan itself, along with a clear articulation of the rationale and driving forces behind those changes.
- **Other Significant Impacts:** Documentation of any other noteworthy events or factors that have substantially impacted the Reservation's forests, such as major weather events (e.g., severe storms, droughts), infrastructure development (e.g., road construction, utility corridors), or significant shifts in land use policies and regulations.

Crucially, the Forest History must, at a minimum, provide precise documentation of the volume and economic value of all past timber harvests (53 IAM 2.8.C.20). When preparing an initial Forest History

document, a standard and effective practice involves organizing the chronological narrative into logical and well-defined periods. While specific temporal divisions will be tailored to the unique historical trajectory of the location, common examples include:

- **Pre-settlement/Creation of the Reservation:** This period describes the ecological characteristics of the forest ecosystem prior to significant European influence and the formal establishment of the Reservation, potentially incorporating invaluable traditional ecological knowledge passed down through generations within the Tribe regarding the pre-colonial forest ecosystem.
- **From Creation of the Reservation to the Establishment of a Forestry Program:** This section documents any forest management or resource utilization practices that occurred during the early years of the Reservation's existence, before the formal development and implementation of a dedicated forestry program.
- **From Start of Forestry Program through the Indian Reorganization Act (IRA) of 1934:** This period details the initial development, key activities, and evolving objectives of the Reservation's forestry program, while also examining the influence of the landmark Indian Reorganization Act of 1934 on forest management policies and practices.
- **From the IRA through Post-World War II:** This section chronicles forest management activities and any significant ecological, social, or political events that transpired during this period of evolving federal Indian policy and the post-war era.
- **The Era of Federal Termination Policy:** This critical period examines any direct or indirect impacts of the federal termination policy on the Reservation's forest resources, management strategies, and Tribal sovereignty over these lands.
- **Intensive Forest Management:** This section describes any periods during which more intensive or specialized forest management practices were implemented on the Reservation, detailing the specific techniques and their outcomes.
- **The Era of PL 93-638 (Indian Self-Determination and Education Assistance Act):** This pivotal period documents the profound impact of increased Tribal self-governance and self-determination on forest management planning, decision-making processes, and on-the-ground implementation of forestry activities.

Enhancing the Future Forest History with Supporting Information:

To significantly enhance the utility, accessibility, and long-term value of the Forest History document, the following categories of supplementary information should be integrated into the forest record:

- **Photographic Record:** The strategic inclusion of a comprehensive photographic record meticulously documenting the Reservation's forest management activities, ecological conditions, and key events over time will dramatically enhance the history's readability, engagement, and provision of invaluable visual context. While locating historical photographs may present challenges, any available images that effectively illustrate particular topics, management practices, or ecological shifts should be diligently incorporated, either thoughtfully interspersed throughout the document's narrative or carefully compiled as a dedicated appendix. It is strongly recommended to meticulously preserve the original photographs or high-quality photographic copies of all used images within the Reservation's official archives.

- **Forest Development/Timber Stand Improvement Work:** This crucial section will provide detailed and quantitative information on all forest development and timber stand improvement (TSI) work conducted on the Reservation's forest lands, including annual acreage treated, specific silvicultural methodologies (thinning, planting, etc.), organizational details (Tribal crews, BIA, contractors), and a clear year-by-year breakdown of funds expended and their sources.
- **Current Forms and Legal/Policy Documents:** A well-organized appendix should include readily accessible copies of all the standardized forms currently in use for various forestry-related activities conducted on the Reservation, such as timber sales contracts, resource use permits, and inspection reports. Furthermore, easily accessible copies of the treaty establishing the La Jolla Indian Reservation and other critically important federal and Tribal legal and/or policy documents directly relevant to forest management should be made readily available in this same manner.
- **Timber Sale Records:** A comprehensive and meticulously maintained list of all past timber sales conducted on the Reservation should be included. This list should detail the specific sale name or identification, the total acreage involved in each sale, the precise date when the sale was formally executed, the documented timber volumes and their assessed economic values both at the time of sale and at the time of final harvest or cut, the full name of the purchaser, and readily accessible copies of the Timber Sale Statement of Completion forms for each sale.

Historical Context and Recent Challenges on the La Jolla Reservation:

Historically, the forests of the La Jolla Indian Reservation have been managed and utilized by Tribal members primarily to meet immediate personal and community needs, reflecting a deep-rooted connection to the land and its resources. A common and sustainable practice traditionally involved a Tribal member identifying a dead or dying tree within the forest and marking it for subsequent harvesting for personal use, such as firewood or construction materials. This historical approach underscores a long-standing, non-commercial ethos in the Tribe's interaction with its forest resources, emphasizing stewardship and direct utilization.

Over the past six years, the Reservation's forest ecosystems have been confronted with a significant and rapidly evolving challenge: a severe and widespread forest insect infestation. This ecological disturbance has manifested as a substantial tree mortality event, primarily driven by the aggressive and destructive Goldspotted Oak Borer (GSOB). To date, conservative estimates indicate that approximately nine hundred (900) mature and ecologically significant coast live oak trees have already succumbed to GSOB attack and the associated physiological stresses and secondary injuries. While ongoing salvage wood operations are currently generating a modest income stream for Tribal enterprises by utilizing these dead and dying trees, the initial and ongoing costs associated with securing necessary labor, acquiring suitable equipment, and providing essential workforce training in safe and effective salvage techniques are proving to be considerable financial and logistical hurdles.

Brief History of Wildfires on the La Jolla Indian Reservation

The history of wildfires on the La Jolla Indian Reservation is intertwined with the natural chaparral and oak woodland ecosystems of Southern California, as well as human activities both within and surrounding the Reservation.

Historically, fire played a natural role in shaping these landscapes. Native American tribes in the region, including the ancestors of the La Jolla Band, often utilized fire as a land management tool for purposes such as promoting certain plant growth, improving hunting conditions, and reducing fuel loads around settlements. The specific fire regimes under traditional management likely varied but were a significant ecological factor and a key aspect of their cultural practices.

With the arrival of European settlers and subsequent changes in land management practices, the frequency and intensity of wildfires began to shift. Fire suppression became a dominant strategy across the region, which, while aimed at protecting life and property, inadvertently led to the accumulation of dense vegetation and increased the potential for larger and more severe wildfires.

Records specific to the La Jolla Indian Reservation's wildfire history are not well documented. However, given its location in a fire-prone region, the Reservation has undoubtedly experienced numerous wildfires over the decades. These fires would have varied in size, intensity, and the specific areas impacted. Factors contributing to these fires likely included:

- **Natural Ignitions:**
 - Lightning strikes are a common cause of wildfires in Southern California, particularly during the dry summer and fall months.
- **Human-Caused Ignitions:**
 - Accidental ignitions from equipment use, debris burning, and other human activities in and around the Reservation have also likely contributed to wildfires.
- **Wildfires Originating Off-Reservation:** Due to the interconnected nature of the landscape, wildfires starting on adjacent federal, state, or private lands have the potential to spread onto the Reservation.

More recently, like much of Southern California, the La Jolla Indian Reservation has faced increasing wildfire risk due to factors such as prolonged drought, hotter temperatures, and the accumulation of fuel in wildland-urban interface areas. The specific impacts of these recent fires would include damage to vegetation, potential threats to structures and infrastructure within residential and civic areas, and impacts on sensitive cultural and natural resources. The increasing influence of climate change is also likely to exacerbate wildfire risk in the region. Efforts to improve the documentation of past fire events are crucial for enhancing future management strategies.

Understanding the historical patterns of wildfires, including their causes and impacts, is crucial for developing effective wildland fire management plans for the La Jolla Indian Reservation. This knowledge informs strategies for fire prevention, fuels management, and emergency response, ultimately aiming to protect tribal members, resources, and the unique character of the Reservation. Ongoing efforts to document past fire events and integrate traditional ecological knowledge will further enhance these management strategies.

14.0 ECONOMIC AND SOCIAL CONTEXT

14.1 Income and Economic Analysis

This section outlines the economic framework for the La Jolla Indian Reservation's Forest Management Plan (FMP), as required by BIA policy (53 IAM 2.8.C.23). It details the Tribe's economic philosophy, projected revenues and costs, and the funding and staffing necessary to implement this plan.

14.1.1 ECONOMIC PHILOSOPHY AND STRATEGY

The Tribe's economic strategy is aligned with its **Community and Economic Prosperity** goals and is not based on traditional commercial timber harvesting of healthy trees. The primary economic driver of this FMP is the creation of a sustainable, value-added enterprise centered on the **salvage of insect-killed trees** and the utilization of **biomass from forest health treatments**.

This approach directly supports the goal of **Ecosystem Health and Resilience** by converting a critical management need—the removal of hazardous dead trees—into an economic opportunity. As this is the Reservation's first FMP, there is no historical income from forest products to inform forecasting. All future net revenue will be managed through the Tribal Natural Resources Fund to support public services and reinvest in forestry program activities.

14.1.2 PROJECTED REVENUE, COSTS, AND BENEFITS

Projected Revenue

Future income will be generated primarily from the sale of products derived from salvaged Goldspotted Oak Borer (GSOB)-killed oak and other dead timber. Revenue streams are anticipated from:

- **Lumber and Slabs:** Milled products sold to local woodworkers, contractors, or the public.
- **Firewood:** Processed and sold to the La Jolla Campgrounds and local communities.
- **Biomass:** Chips or other biomass materials sold for landscaping or energy, where markets exist.

Projections are difficult without an operational history, but the goal is for these activities to become self-sustaining. The Tribe will track all revenue and product valuation to establish a baseline for future planning.

Projected Costs

Implementing this FMP involves significant operational costs. Key expenditures include:

- **Forest Treatments:** Costs for thinning, salvage logging, and fuels reduction, which vary by prescription and terrain.
- **Milling and Processing:** Operational costs for the sawmill, including staffing, maintenance, and energy.

- **Sales and Administration:** Costs associated with appraising, marketing, and managing the sale of forest products.

A detailed cost-benefit analysis, documenting per-acre treatment costs and projected returns, will be conducted for all proposed forest management projects to ensure they are financially sound.

Community and Economic Co-Benefits

Sustainable forest management provides significant benefits to the Tribal community beyond direct revenue:

- **Community Protection:** Proactive fuels management directly reduces wildfire risk to homes, cultural sites, and infrastructure. 🌳
- **Workforce Development:** Forestry operations create job training opportunities and stable income for Tribal members, building a skilled local workforce.
- **Support for Tribal Enterprises:** A local, sustainable source of firewood for the campground and other enterprises eliminates the risk of importing invasive pests.

14.1.3 FUNDING AND STAFFING REQUIREMENTS

Effective FMP implementation is wholly dependent on securing adequate funding and maintaining a skilled workforce, as required by the National Indian Forest Resources Management Act.

Funding

The Tribal forestry program is currently funded by **project-based grants**. From 2021 to 2024, the Tribe successfully secured **\$5,632,444** for forest health, GSOB mitigation, and milling infrastructure.

Table 14. Grant Funding Secured (2021 - 2024)

Year Funding Source	Amount
2021 Department of Conservation	\$180,000
2021 BIA Forestry	\$250,000
2022 Climate Science Alliance	\$890,000
2022 The Watershed Center	\$50,000
2022 Resource Conservation District	\$390,000
2022 BIA Milling Infrastructure	\$250,000
2023 NRCS Forestry Practices	\$138,000
2023 NRCS	\$90,000
2024 CAL FIRE	\$2,500,000
2024 U.S. Forest Service	\$894,444
Total	\$5,632,444

The long-term financial strategy is to transition the biomass salvage operation into a self-sustaining revenue source while continuing to pursue federal, state, and private grants.

Staffing

Successful implementation requires a dedicated, professional team.

- **Current Staffing:** Staffing is currently supported by grant funds and includes project managers and technicians.
- **Required Staffing:** To fully execute this FMP, the Tribe will need to secure stable funding for core positions, including a **Forestry Program Manager, Forestry Technicians, and a Sawmill Operator/Manager.**

It is understood that if the required funding and staffing levels cannot be secured, the management activities and goals outlined in this FMP must be re-examined and modified to align with available resources.

14.2 Native American Economic Impact

In accordance with BIA policy (**53 IAM 2.8.C.24**), this section analyzes the direct economic benefits of the Forest Management Plan (FMP) for the members of the La Jolla Band of Luiseño Indians. The analysis compares the economic landscape under past management, where no formal forestry program existed, to the planned management activities outlined in this FMP for the period of 2025 through 2030.

The benefits detailed below include projected income from wages and self-employment in forestry and fire management, revenue from the sale of salvaged forest products, and the non-market value of resources harvested for personal and subsistence use, such as firewood and traditional plants.

Table 14.2: Estimated Annual Economic Benefits for Tribal Members (2025-2030)

Economic Component	Past Management (Pre-FMP)	Planned Management (Annual Estimate)
Wages	\$0	~\$600,000
Firewood Sales (Salvage)	\$0	~\$64,000
Self-Employment Income	\$0	~\$5,000
Personal Use Value	\$0	~\$5,000

14.3 Regional Economic and Social Impact

In accordance with BIA policy (**53 IAM 2.8.C.26**), this section analyzes the broader social and economic effects of the forestry program on the surrounding regional economy. The wages earned and revenue generated from forestry activities create a **multiplier effect**, where money spent locally on goods and services supports additional jobs in the community.

The following analysis compares the costs and benefits of the planned management activities against the baseline of past management. The regional economic impact is calculated using a standard multiplier from the Indian Forest Management Handbook, which estimates the creation of additional service-related jobs and income in the local economy.

Table 14.3: Estimated Annual Social and Economic Costs & Benefits

Economic Component	Past Management (Pre-FMP)	Planned Management (Annual Estimate)
PROGRAM COSTS		
Forest Management Operations	(\$0)	(\$100,000)
Administrative Deductions	(\$0)	(\$5,000)
DIRECT BENEFITS		
Wages & Self-Employment	\$0	\$1,505,000
Personal Use Value	\$0	\$5,000
SOCIAL BENEFITS		
Employment (Full-Time Tribal)	0	12
Employment (Part-Time Tribal)	0	4
REGIONAL ECONOMIC IMPACTS		
Indirect Employment Created	0	2
Indirect Income Generated	\$0	\$200,000

Export to Sheets

Note: The Regional Economic Impact is calculated using a standard multiplier suggested in the Indian Forest Management Handbook (53 IAM 2H).

14.4 Economic Trends

In accordance with BIA policy (**53 IAM 2.8.C.27**), this section analyzes economic trends to project future income levels and employment opportunities under the management activities outlined in this FMP. As this is the first formal FMP for the Reservation, historical data is limited; therefore, this analysis uses current market data as a baseline for future projections.

Market Context and Future Projections

The primary economic opportunity for the Tribe's forestry program is the sale of salvaged firewood. A 2021 market analysis provides a baseline for potential revenue:

- **Regional Market Price (2021):** Oak firewood sold for \$300 to \$700 per cord.
- **Local Retail Price (2021):** Locally sourced oak firewood bundles on the Reservation were priced at \$8 each, with an estimated 100 bundles per cord.

An initial, subsidized salvage operation in 2021 provided income for seven individuals, demonstrating the potential for job creation. A full feasibility study for a dedicated Tribal forestry enterprise is planned to assess long-term economic viability.

Future income and employment levels under this FMP will be directly tied to the success of the salvage operation. This analysis recognizes that harvesting a higher volume of salvaged wood does not automatically translate to higher income, as profitability depends on operational efficiency and market value. The economic focus will be on the total value derived from sustainably managing these salvaged resources, rather than simply on the volume harvested.

14.5 Non-Native Economic Impact

In accordance with BIA policy (**53 IAM 2.8.C.25**), this section analyzes the economic impact of the forestry program on non-Indian beneficiaries and the broader regional economy.

Currently, no forest products from the La Jolla Indian Reservation are utilized or sold outside the community, so there is no direct non-native economic impact from product sales. The primary economic benefits are currently localized within the Tribe.

However, the Tribe is proactively exploring the establishment of a **forest products enterprise** focused on processing salvaged wood. The successful development of such an enterprise would create a significant positive economic impact on the surrounding region by:

- Creating indirect employment in related service and supply industries.
- Generating new local spending by both the enterprise and its employees on regional goods and services.
- Potentially supplying locally sourced products, such as firewood or milled lumber, to the regional market.

A feasibility study is currently underway to determine the most viable pathway for this enterprise, which holds the promise of creating shared economic prosperity for both the Tribal community and the surrounding region.

14.6 Social Assessment

In accordance with BIA policy (**53 IAM 2.8.C.28**), this section documents the social conditions of the La Jolla Indian Reservation and analyzes how this Forest Management Plan (FMP) aligns with the community's values and well-being.

Social Context and Interplay with Forest Resources

Social conditions on the Reservation are experiencing positive development, driven by new business ventures and expanding job opportunities. Increased access to services in nearby communities has also lessened the direct subsistence demand on some of the Reservation's natural resources.

However, these positive trends are challenged by significant environmental pressures, including climate change and invasive species like the Goldspotted Oak Borer (GSOB), which are causing a decline in forest health. This creates a critical need for proactive forest management to balance the community's need for land and resources with the imperative to restore and protect the ecological integrity of the forest.

Positive Social Impacts of the Forest Management Plan

This FMP has been carefully designed to be socially responsible and to avoid negative impacts on Tribal members who rely on forest resources. The plan is expected to generate the following positive social outcomes:

- **Strengthen Community Resilience:** By actively managing forest health and implementing fuels reduction projects, the FMP directly reduces wildfire risk to the community, enhancing overall safety.
- **Support Cultural Preservation:** The plan's emphasis on protecting culturally significant areas and resources ensures that management activities support, rather than harm, invaluable Tribal heritage.
- **Promote Educational Opportunities:** Forest management activities will serve as living classrooms for Tribal youth and community members, fostering awareness of ecology, traditional knowledge, and sustainable practices.
- **Enhance Sustainable Recreation:** By improving forest health, the plan enhances the quality of sustainable recreational opportunities for Tribal members, fostering a deeper connection to the land.

Ongoing engagement with Tribal members will be crucial to ensure the FMP's implementation remains aligned with the social values of the community, and an adaptive management framework will allow for adjustments to address any unforeseen impacts.

14.7 Document Archiving

This Forest Management Plan (FMP) is a legislatively mandated document that sets the trust standards for managing the Reservation's forest resources. Because accountability for these standards has no statute of limitations, this plan and all associated records must be permanently retained, even after being superseded by future plans.

Federal Archiving Requirement

In accordance with BIA policy (**53 IAM 2.8.C.29**), the FMP must be permanently archived to ensure a complete and enduring management record. To fulfill this requirement, two (2) paper copies and two (2)

2907 electronic PDF copies of the approved FMP and all associated planning documents will be forwarded to
2908 the **BIA Central Office Forest Document Library** for permanent retention.

2909 **Tribal Record-Keeping Protocol**

2910 In addition to the federal requirement, the La Jolla Band of Luiseño Indians is fully committed to its
2911 own robust archiving strategy to ensure data security and local accessibility. The Tribe will:

- 2912 • Maintain digital archives of all approved FMPs and related documents on the Natural Resources
2913 Department network and a dedicated in-office hard drive.
- 2914 • Implement off-site backups of all forestry records twice a year to safeguard against data loss
2915 from catastrophic events like wildfires.

2916 This dual archiving strategy—at both the Tribal and federal levels—upholds the principles of
2917 transparency, accountability, and the enduring trust responsibility for the La Jolla Indian Reservation's
2918 forest resources.

2919 **14.8 Authority and Federal Compliance**

2920 All forest management activities conducted under this Forest Management Plan (FMP) will comply with
2921 all applicable Tribal, federal, laws and regulations (53 IAM 2.8.C.30). The Bureau of Indian Affairs
2922 (BIA), in cooperation with the Tribe, is responsible for ensuring this compliance. The approval of this
2923 FMP by the BIA is a federal action that triggers the need for comprehensive environmental review.

2924 **National Environmental Policy Act (NEPA)**

2925 Full compliance with **NEPA** is foundational to this FMP. The NEPA process ensures that all
2926 management decisions are made with a clear understanding of their potential environmental
2927 consequences.

- 2928 • **Process:** An Environmental Assessment (EA) will be prepared to analyze the potential impacts
2929 of implementing this FMP. All NEPA documentation will adhere to Council on Environmental
2930 Quality (CEQ) Regulations (40 CFR Parts 1500-1508) and relevant BIA guidelines (59 IAM).
- 2931 • **Public Record:** A copy of the final NEPA documentation—either a Finding of No Significant
2932 Impact (FONSI) or a Record of Decision (ROD)—will be included as an appendix to this FMP.

2933 **Compliance with Other Key Federal Statutes**

2934 In addition to **NEPA**, all activities will adhere to other key federal laws. Consultation and procedural
2935 requirements for the most relevant statutes include:

- 2936 • **National Historic Preservation Act (NHPA):** Requires consultation with the Tribal Historic
2937 Preservation Officer (THPO) to ensure the identification and protection of cultural and
2938 archaeological resources before any ground-disturbing activities.

- **Endangered Species Act (ESA):** Requires consultation with the U.S. Fish and Wildlife Service (USFWS) for any action that may affect a federally listed threatened or endangered species or its critical habitat.
- **Clean Water Act (CWA):** Requires the implementation of Best Management Practices (BMPs) to protect water quality in streams, wetlands, and other water bodies during forestry operations.
- **Archaeological Resources Protection Act (ARPA):** Governs the protection of archaeological resources on Indian lands.
- **Native American Graves Protection and Repatriation Act (NAGPRA):** Provides for the protection of Native American graves and cultural items discovered during project activities.

Consultation and Compliance Responsibility

Effective and efficient compliance is achieved through close coordination and a clear understanding of responsibilities.

- **Consultation Protocol:** The BIA and the Tribe will consult with the THPO for cultural resource compliance and with the USFWS for endangered species. For projects adjoining public lands or state highways, the relevant agencies will be notified to ensure coordinated environmental review.
- **State and Local Requirements:** Projects utilizing state funds (e.g., from CAL FIRE) may require additional compliance with the California Environmental Quality Act (CEQA).
- **Funding and Tribal Involvement:** The costs of federal compliance are funded through the forestry program, which can diminish funds available for on-the-ground management activities. Therefore, the **Tribe will be an active partner** in all compliance discussions to ensure processes are efficient and that Tribal ordinances and standards (e.g., for cultural surveys or water quality) are utilized where applicable to meet federal mandates.

APPENDIX 1 – DEFINITIONS

Appendix 1 – Definitions

Allowable Annual Cut (AAC): The AAC is the administratively determined annual harvest level derived from the Indicated Allowable Cut. It represents the assigned annual volume of forest products that can be harvested during a specified planning period.

Class I Watercourse: These are watercourses that serve as domestic water supply sources or contain fish (present year-round or seasonally), including habitat necessary for fish migration and spawning. Generally, these are perennial streams where fish are present at least seasonally. The width of the watercourse protection zone varies based on the adjacent slope: 75 feet for slopes of 0-30%, 100 feet for slopes of 30%-50%, and 150 feet for slopes of 50% or greater (refer to the California Forest Practice Rules for detailed specifications).

Class II Watercourse: These are watercourses where fish are present offsite within 1,000 feet downstream (present year-round or seasonally) and/or provide aquatic habitat for non-fish species. Generally, these are intermittent streams that typically flow into the early summer and support aquatic life. The width of the watercourse protection zone varies based on the adjacent slope: 50 feet for slopes of 0-30%, 75 feet for slopes of 30%-50%, and 100 feet for slopes of 50% or greater (refer to the California Forest Practice Rules for detailed specifications).

Class III Watercourse: These are watercourses where no aquatic life is present but show evidence of being capable of transporting sediment to Class I or II watercourses during normal high-water flow conditions. The equipment exclusion zone width shall be 25 feet or more on slopes less than 30% and 50 feet or more on slopes greater than 30% (refer to the California Forest Practice Rules for detailed specifications).

Commercial Forest Land: As defined in this context, Commercial Forest Land refers to forest land that is currently producing or has the inherent capacity to produce marketable forest products. It is also administratively available for intensive forest management practices aimed at sustained production.

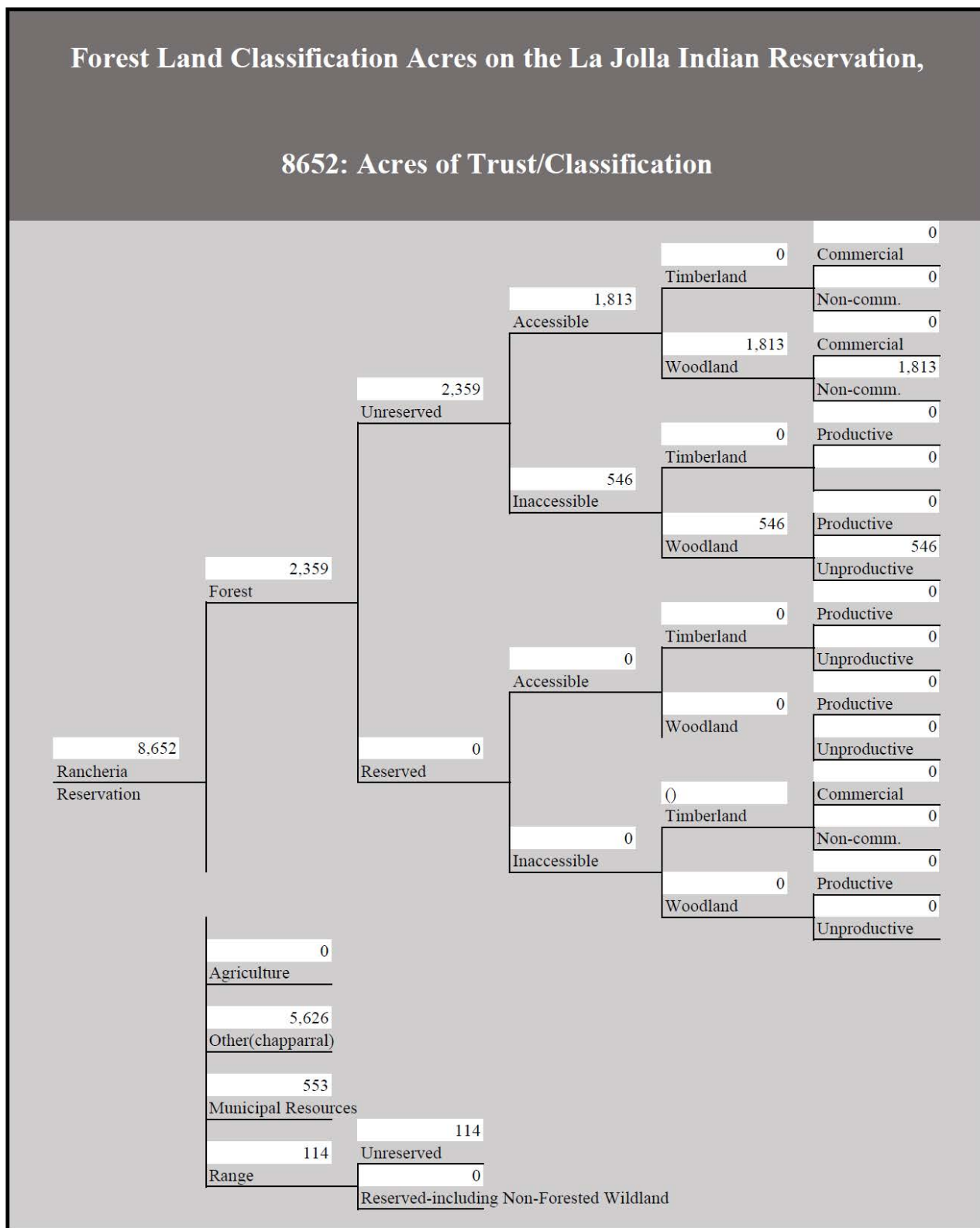
Forest Land: Forest land, or forest, is defined as an ecosystem at least one acre in size, encompassing both timberland and woodland. It is characterized by a more or less dense and extensive tree canopy, with a current or historical tree crown cover of at least ten percent. This land is not currently developed for or planned for exclusive non-forest resource uses. This definition aligns with 25 CFR § 163.1.

Indian Forest Land: According to 25 CFR § 163.1, Indian forest land encompasses Indian land, including commercial, non-commercial, productive, and unproductive timberland and woodland. This land is considered chiefly valuable for either the production of forest products or for maintaining watershed or other land values enhanced by forest cover, regardless of whether a formal inspection and land classification has been conducted.

Indicated Allowable Cut (IAC): The IAC is the scientifically calculated periodic (annual or other specified period) harvest rate that is projected to ensure long-term forest sustainability.

- 2999 **Non-Forest Land:** Land that either does not currently contain trees or does not have a current tree
3000 crown cover of at least ten percent.
- 3001 **Noncommercial Forest Land:** This refers to forest land that is available for extensive management but
3002 lacks the inherent capability to produce sustainable marketable forest products within a typical rotation
3003 period. While economically viable harvesting may occur on such land, the site quality does not justify
3004 significant investment to enhance future forest crops.
- 3005 **Productive Forest Land:** Productive Forest Land is forest land that is currently producing or has the
3006 inherent capability to produce marketable forest products but is unavailable for harvest due to
3007 administrative restrictions or impractical access.
- 3008 **Regulated Allowable Cut (RAC):** The regulated allowable cut is the periodic harvest rate designed to
3009 lead to the establishment of a fully regulated forest structure over time.
- 3010 **Timberland:** Timberland refers to forest lands that are currently stocked or have the inherent capability
3011 to be stocked with tree species that are regionally utilized for the production of lumber, pulpwood, poles,
3012 or veneer products.
- 3013 **Unproductive Forest Land:** This refers to forest land that neither produces nor has the inherent
3014 capability to produce marketable forest products and is also unavailable for harvest due to administrative
3015 restrictions or impractical access.
- 3016 **Woodland:** Woodlands are defined in 25 CFR § 163.1 as "forest land not included within the
3017 timberland classification, stocked, or capable of being stocked, with tree species of such form and size to
3018 produce forest products that are generally marketable within the region for products other than lumber,
3019 pulpwood, or veneer." As clarified in 25 CFR § 163.1's definition of "forest or forest land," woodlands
3020 are recognized as a legitimate forest type. Forest products derived from woodland ecosystems
3021 specifically include pinyon nuts and acorns, as well as more general forest products like bolts,
3022 pulpwood, fuelwood, posts, poles, bark, Christmas trees, stays, and branches, which can also be
3023 harvested from other forest land types.

APPENDIX 2 – FOREST LAND CLASSIFICATION



FOREST ACRES

Forest Land (25CFR)	"Indian forest land" means Indian lands, including commercial and non-commercial timberland and woodland, that are considered chiefly valuable for the production of forest products or to maintain watershed or other land values enhanced by a forest cover, regardless whether a formal inspection and land classification action has been taken;Forest or forest land means an ecosystem at least one acre in size, including timber land and woodland, which: is characterized by a more or less dense and extensive tree cover; contains, or once contained, at least ten percent crown cover, and is not developed or planned for exclusive non-forest resource use.
Nonforest Land	Lands that do not fall under the definition of Forest Land. This is land that (1) has never supported forests (e.g., barren, alpine tundra), (2) was formerly forested, but has been converted to a non-forest area class (e.g., rangeland, cropland), or (3) presently meets the stocking requirements for forest land, but human activity on the site will preclude the natural succession of the stand (residential development). Other examples of non-forest land are improved roads of any width, graded or otherwise regularly maintained for long-term continuing use, and rightsof-way of all power lines, pipelines, other transmission lines, and operating railroads. If intermingled in forest areas, unimproved roads and non-forest strips must be at least 120-feet wide and 1 acre in size to qualify as non-forest land.
Unreserved	Forest land that is administratively available for harvest.
Reserved	Forest land that is unavailable for harvest because of administrative restrictions.
Accessible	Forest land that is physically, administratively and economically accessible to harvest or is anticipated to become so during the management plan period
Inaccessible	Forest lands that are inaccessible by conventional logging methods (i.e. steep terrain or cut-off ridges or canyons) or restricted by special treatments (i.e. disease and insect areas) are excluded from lands that are suitable for timber management.
Woodland (25CFR)	Woodland means forest land not included within the timberland classification, stocked, or capable of being stocked, with tree species of such form and size to produce forest products that are generally marketable within the region for products other than lumber, pulpwood or veneer.
Timberland (25CFR)	Timberland means forest lands stocked, or capable of being stocked, with tree species that are regionally utilized for lumber, pulpwood, poles or veneer products.
Commercial Forest Land (25CFR)	Commercial forest land means forest land that is producing or capable of producing crops of marketable forest products and is administratively available for intensive management and sustained production.
Noncommercial Forest Land (25CFR)	Noncommercial forest land means forest land that is available for extensive management, but is incapable of producing sustainable forest products within the general rotation period. Such land may be economically harvested, but the site quality does not warrant significant investment to enhance future crops.
Productive Forest Land (25CFR)	Productive forest land means forest land producing or capable of producing marketable forest products that is unavailable for harvest because of administrative restrictions or because access is not practical.
Unproductive Forest Land (25CFR)	Unproductive forest land means forest land that is not producing or capable of producing marketable forest products and is also unavailable for harvest because of administrative restrictions or because access is not practical.
Categories Related to Classification	
	Category-1 - Major Forested Reservation - Comprised of more than 10,000 acres of commercial timberland in trust, or determined to have more than 1.0 MMBM (million board measure) harvest of timber products annually.
	Category-2 - Minor Forested Reservation - Comprised of less than 10,000 acres of commercial timberland in trust, and less than 1.0 MMBM harvest of timber products annually, or whose forest resource is determined by the Regional Office to be of significant commercial timber value.
	Category-3 - Significant Woodland Reservation - Comprised of an identifiable forest area of any size which is lacking a timberland component, and whose forest resource is determined by the Regional Office to be of significant commercial woodland value.
	Category-4 - Minimally Forested Reservation - Comprised of an identifiable forest area of any size determined by the Regional Office to be of minor commercial value at this time.
	Category-5 - Reservation or Indian property with forest land that the Bureau is charged with some degree of legal responsibility, but the land is not in [Federal] trust status."

AGRICULTURE ACRES

Agriculture	1) The term "Indian agricultural lands" means Indian land, including farmland and rangeland, but excluding Indian forest land, that is used for the production of agricultural products, and Indian lands occupied by industries that support the agricultural community, regardless of whether a formal inspection and land classification has been conducted.
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RANGE ACRES

Range	1) The term "rangeland" means Indian land, excluding Indian forest land, on which the native vegetation is predominantly grasses, grass-like plants, forbs, half-shrubs or shrubs suitable for grazing or browsing use, and includes lands revegetated naturally or artificially to provide a forage cover that is managed as native vegetation.
Unreserved	Range Land that is administratively available for harvest/grazing.
Reserved	Range land that is unavailable for harvest/grazing because of administrative restrictions.

MUNICIPAL

Municipal	relating to a city or town, generally developed resources such as areas for housing, manufacturing, Tribal businesses such as casinos etc.
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APPENDIX 3 – FMP FORMAL REVIEW DOCUMENTATION

During this formal or periodic recommended review, the person or team answering the following questions should determine the answer to each question and fill in the answer either below or in a separate document. If the person or team answering the question believes that a major change has occurred, then normally it would be expected that the plan should be changed to address the different conditions associated with the change. If the decision is made to change the plan, then the revised plan pages should be adopted and appropriate officials with signature authority should sign a new signature page, including at a minimum, a representative of the Landowner and someone from the BIA.

1. Has there been a major ^{1/} change in Landowner direction such that it would impact forest management on the property? If yes – explain below. <u>1/</u> (A major change is defined as a 10% increase or decrease in the forested condition of the property. The change generally applies to acreage under management, stocking, growth, habitat quality, etc.)	Yes	No
2. Has there been a major ^{1/} change in federal policy such that it would impact forest management on the property? If yes – explain below.	Yes	No
3. Has there been a change in the acreage under management such that it would create a major ¹ change to forest management on the property? If yes – explain below.	Yes	No
4. Has new or revised inventory information (such as a remeasurement of the CFI or a new type of map) been developed that would create a major ^{1/} change in the growth or stocking on the property? If yes – explain below.	Yes	No
5a. Have insect or disease conditions been monitored periodically? If no – explain below.	Yes	No
5b. Have insect or disease conditions caused a major ^{1/} change in the forested condition of the property? If yes – explain below.	Yes	No
6. Have wildland fires occurred since the last review that caused a major ^{1/} change in the forested condition of the property? If yes – explain below.	Yes	No
7. Has trespass, including wildland fire trespass, caused a major ^{1/} change in the forested condition of the property? If yes – explain below.	Yes	No
8a. Has steady progress been made to reduce the forest development backlog? If no – explain below.	Yes	No
8b. Has there been a major ^{1/} change in the status of forest development needs on the property? If yes – explain below.	Yes	No
9a. Has steady progress been made to layout timber sales and sell the AAC? If no – explain below.	Yes	No

9b. Have timber sales that have occurred been reviewed to determine compliance with this FMP? If no – explain below.	Yes	No
10. Has there been a major ^{1/} change to the quality of the waters on the property including wetlands and wild and scenic rivers resulting from forest management or from the condition of the forest? If yes – explain below.	Yes	No
11. Has there been a major ^{1/} change to the quality of the T&E species habitat on the property resulting from forest management or from the condition of the forest? If yes – explain below.	Yes	No
12. Has there been a major ^{1/} change to National Register-listed archaeological or historical resources on the property resulting from forest management or from the condition of the forest? If yes – explain below.	Yes	No
13. Has there been a major ^{1/} change to public health and safety resulting from forest management or from the condition of the forest? If yes – explain below.	Yes	No
14. Has there been a major ^{1/} change in the extent of noxious weeds or non-native invasive species due to forest management or from the condition of the forest? If yes – explain below.	Yes	No
15. Has there been a major ^{1/} change to the condition of the forest due to other reasons not described above? If yes – explain below.	Yes	No

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3038 Approved By: _____ Date: _____

3039 Tribal Representative

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3043 Approved By: _____ Date: _____

3044 Director, Pacific Region, USDI Bureau of Indian Affairs

APPENDIX 4 – CADASTRAL SURVEYING PROGRAM

Federal assistance can be obtained for conducting cadastral surveys, as described below.

The Indian Cadastral Surveying Program is a cooperative program between the BIA and the Bureau of Land Management (BLM). These agencies share a trust obligation for the delineation, protection, and improvement of Indian trust properties. The BIA currently funds one Indian Land Surveyor for the Pacific Region.

Indian trust lands nationwide are poorly marked, and increased resources have been allocated to address the backlog and new cadastral survey needs of Indian trust parcels. However, funds and services are limited and planning for upcoming projects is often done as far as four years in advance. Services are generally not made available until one year after the request. Project proposals are due March 1. The projects are prioritized, and applicants are notified whether their projects have been approved or not.

Assistance in this program can be received by calling Thomas Tauchus, Indian Land Surveyor, Pacific Regional Office, at 916-978-4313 or email at ttauchus@ca.blm.gov. The BLM Cadastral Indian Program Manager for the region is Mr. Lance Bishop, whose contact number is 916-978-4311.

In addition to the priority allocation process described above, a certain amount of additional discretionary funding is allocated yearly to the BIA Regional Offices for land surveying purposes, (Hayward, pers. comm. 2006).

In addition to the above-noted potential funding sources, the PRO and Agency often have “year-end” dollars available at the end of the fiscal year that can be allocated to various projects. When these funds become available all the Tribe’s in the region are notified so that they can submit proposals.

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APPENDIX 5 – ACRES OF FOREST SOILS

Soil Type by Tribal Status in General Forested Areas						
TR STATUS	Soil Mapunit Symbol	Area (acres)		TR STATUS	Soil Mapunit Symbol	Area (acres)
Allotted	BrE	13		Tribal	AcG	41
	CaC	24			BbG	27
	CaD2	5			BoC	7
	CnG2	4			BrE	67
	CuG	12			BrG	92
	FeE2	26			CaC	29
	HmD	8			CaD2	17
	HmE	13			CmrG	21
	HnE	105			CnG2	63
	HnG	33			CtF	38
	Lu	4			CuE	28
	MvD	13			CuG	166
	SpG2	29			FeE2	2
	SsE	33			HmD	29
	SvE	1			HmE	59
	ToG	9			HnE	297
<i>Allotted Total</i>		<i>333</i>			HnG	242
Fee	BrE	0			LrG	0
	CaC	3			Lu	5
	CaD2	1			MrG	13
	CuG	0			MvD	24
	FeE2	0			Rm	96
	HmD	4			SpG2	231
	HmE	9			SsE	67
	HnE	41			SvE	40
	HnG	2			ToG	601
	Lu	1		<i>Tribal Total</i>		<i>2,304</i>
	MvD	2				
	SpG2	9				
	SsE	6				
<i>Fee Total</i>		<i>79</i>		Grand Total		2,716

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APPENDIX 6 – FVS INVENTORY SUMMARY

The following tables are organized by vegetation type. The first table in each set shows current stocking. The second table shows estimated growth and mortality. As noted, the growth estimate for the COW strata is negative, and was subtracted from overall hardwood growth in order to calculate the potential allowable harvest levels, as discussed in Chapter 4.

---La Jolla COW

DATE RUN - 02/05/2016
PLOT ACRES - 17.00
MEASUREMENT LENGTH - 10.00 YEARS

TABLE 2-1 S T O C K A N D S T A N D SUMMARY (PER ACRE)

: - - - - - 2016 S T O C K I N G - - - - - : - - - - - 2016 S T O C K I N G - - - - - :

:		BASAL	CUBIC	BOARD	% CU	% BD	:		BASAL	CUBIC	BOARD	% CU	% BD	:
:	TREES	AREA	FEET	FEET	DEF	DEF	:	TREES	AREA	FEET	FEET	DEF	DEF	:

:	---	(202)	Douglas-fir	:	---	(801)	Coast live oak	:
---	-----	-------	-------------	---	-----	-------	----------------	---

SEED&SAP	0- 4	:	0.00	0.000	0.00	0.0	0.00	0.00	805.88	4.395	0.00	0.0	0.00	0.00	:
----------	------	---	------	-------	------	-----	------	------	--------	-------	------	-----	------	------	---

POLES	6- 9	:	0.00	0.000	0.00	0.0	0.00	0.00	5.29	1.476	9.41	28.1	9.60	0.00	:
-------	------	---	------	-------	------	-----	------	------	------	-------	------	------	------	------	---

SM. SAW	11-16	:	0.59	0.260	2.65	11.8	0.00	0.00	29.41	24.281	344.82	1330.4	1.56	0.00	:
---------	-------	---	------	-------	------	------	------	------	-------	--------	--------	--------	------	------	---

LG. SAW	18-40	:	0.00	0.000	0.00	0.0	0.00	0.00	26.47	86.092	1914.29	10015.4	11.20	0.00	:
---------	-------	---	------	-------	------	-----	------	------	-------	--------	---------	---------	-------	------	---

TOTAL	:	0.59	0.260	2.65	11.8	0.00	0.00	0.00	867.06	116.244	2268.53	11373.8	9.85	0.00	:
-------	---	------	-------	------	------	------	------	------	--------	---------	---------	---------	------	------	---

:	---	(811)	Engelmann oak	:	---	All Softwood Species	:
---	-----	-------	---------------	---	-----	----------------------	---

SEED&SAP	0- 4	:	70.59	0.770	0.00	0.0	0.00	0.00	0.00	0.000	0.00	0.0	0.00	0.00	:
----------	------	---	-------	-------	------	-----	------	------	------	-------	------	-----	------	------	---

POLES	6- 9	:	2.35	0.635	4.41	0.0	2.60	0.00	0.00	0.000	0.00	0.0	0.00	0.00	:
-------	------	---	------	-------	------	-----	------	------	------	-------	------	-----	------	------	---

SM. SAW	11-16	:	4.71	3.433	0.00	0.0	0.00	0.00	0.59	0.260	2.65	11.8	0.00	0.00	:
---------	-------	---	------	-------	------	-----	------	------	------	-------	------	------	------	------	---

LG. SAW	18-40	:	4.71	11.226	0.00	0.0	0.00	0.00	0.00	0.000	0.00	0.0	0.00	0.00	:
---------	-------	---	------	--------	------	-----	------	------	------	-------	------	-----	------	------	---

TOTAL	:	82.35	16.064	4.41	0.0	2.60	0.00	0.00	0.59	0.260	2.65	11.8	0.00	0.00	:
-------	---	-------	--------	------	-----	------	------	------	------	-------	------	------	------	------	---

:	---	All Hardwood Species	:	---	All Species Combined	:
---	-----	----------------------	---	-----	----------------------	---

SEED&SAP	0- 4	:	876.47	5.165	0.00	0.0	0.00	0.00	876.47	5.165	0.00	0.0	0.00	0.00	:
----------	------	---	--------	-------	------	-----	------	------	--------	-------	------	-----	------	------	---

POLES	6- 9	:	7.65	2.111	13.82	28.1	7.48	0.00	7.65	2.111	13.82	28.1	7.48	0.00	:
-------	------	---	------	-------	-------	------	------	------	------	-------	-------	------	------	------	---

SM. SAW	11-16	:	34.12	27.714	344.82	1330.4	1.56	0.00	34.71	27.973	347.47	1342.1	1.54	0.00	:
---------	-------	---	-------	--------	--------	--------	------	------	-------	--------	--------	--------	------	------	---

LG. SAW	18-40	:	31.18	97.318	1914.29	10015.4	11.20	0.00	31.18	97.318	1914.29	10015.4	11.20	0.00	:
---------	-------	---	-------	--------	---------	---------	-------	------	-------	--------	---------	---------	-------	------	---

TOTAL	:	949.41	132.308	2272.94	11373.8	9.84	0.00	0.00	950.00	132.568	2275.59	11385.6	9.83	0.00	:
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La Jolla Indian Reservation Forest Management Plan Appendix 6 – FVS Inventory Summary

---La Jolla COW

DATE RUN - 02/05/2016
PLOT ACRES - 17.00
MEASUREMENT LENGTH - 5.00 YEARS

TABLE 2-2 MEASURED ANNUAL GROWTH (PER ACRE)

2016-2021 MEASURED ANNUAL GROWTH										2016-2021 MEASURED ANNUAL GROWTH									
:ACCRETION+INGROWTH:--- MORTALITY ---:-- TOTAL GROWTH --										:ACCRETION+INGROWTH:--- MORTALITY ---:-- TOTAL GROWTH --									
: NET NET :										: NET NET :									
: BA CU BD :	: BA CU BD :	: BA CU BD :	: BA CU BD :	: BA CU BD :	: BA CU BD :	: BA CU BD :	: BA CU BD :	: BA CU BD :	: BA CU BD :	: BA CU BD :	: BA CU BD :	: BA CU BD :	: BA CU BD :	: BA CU BD :	: BA CU BD :	: BA CU BD :	: BA CU BD :	: BA CU BD :	
: --- (202) Douglas-fir										: --- (801) Coast live oak									
SEED&SAP 0- 4 :	0.0	0.0	0.:	0.0	0.0	0.:	0.0	0.0	0.:	0.5	0.0	0.:	0.1	0.0	0.:	0.5	0.0	0.:	
POLES 6- 9 :	0.0	0.0	0.:	0.0	0.0	0.:	0.0	0.0	0.:	0.0	0.1	0.:	0.1	0.5	2.:	-0.1	-0.4	-1.:	
SM. SAW 11-16 :	0.0	0.2	1.:	0.0	0.0	0.:	0.0	0.2	1.:	0.1	3.7	17.:	0.3	4.9	19.:	-0.2	-1.1	-2.:	
LG. SAW 18-40 :	0.0	0.0	0.:	0.0	0.0	0.:	0.0	0.0	0.:	0.2	10.4	64.:	0.8	18.4	88.:	-0.6	-8.0	-24.:	
TOTAL :	0.0	0.2	1.:	0.0	0.0	0.:	0.0	0.2	1.:	0.4	14.3	81.:	1.3	23.8	109.:	-0.9	-9.5	-28.:	
: --- (811) Engelmann oak										: --- All Softwood Species									
SEED&SAP 0- 4 :	0.2	0.0	0.:	0.0	0.0	0.:	0.2	0.0	0.:	0.0	0.0	0.:	0.0	0.0	0.:	0.0	0.0	0.:	
POLES 6- 9 :	0.0	0.1	0.:	0.0	0.0	0.:	0.0	0.1	0.:	0.0	0.0	0.:	0.0	0.0	0.:	0.0	0.0	0.:	
SM. SAW 11-16 :	0.0	0.0	0.:	0.0	0.0	0.:	0.0	0.0	0.:	0.0	0.2	1.:	0.0	0.0	0.:	0.0	0.2	1.:	
LG. SAW 18-40 :	0.0	0.0	0.:	0.0	0.0	0.:	0.0	0.0	0.:	0.0	0.0	0.:	0.0	0.0	0.:	0.0	0.0	0.:	
TOTAL :	0.1	0.1	0.:	0.0	0.0	0.:	0.1	0.1	0.:	0.0	0.2	1.:	0.0	0.0	0.:	0.0	0.2	1.:	
: --- All Hardwood Species										: --- All Species Combined									
SEED&SAP 0- 4 :	0.7	0.0	0.:	0.1	0.0	0.:	0.6	0.0	0.:	0.7	0.0	0.:	0.1	0.0	0.:	0.6	0.0	0.:	
POLES 6- 9 :	0.0	0.2	0.:	0.1	0.5	2.:	-0.1	-0.3	-1.:	0.0	0.2	0.:	0.1	0.5	2.:	-0.1	-0.3	-1.:	
SM. SAW 11-16 :	0.2	3.7	17.:	0.3	4.9	19.:	-0.2	-1.1	-2.:	0.2	3.9	18.:	0.3	4.9	19.:	-0.2	-1.0	-1.:	
LG. SAW 18-40 :	0.3	10.4	64.:	0.8	18.4	88.:	-0.5	-8.0	-24.:	0.3	10.4	64.:	0.8	18.4	88.:	-0.5	-8.0	-24.:	
TOTAL :	0.5	14.4	81.:	1.3	23.8	109.:	-0.9	-9.4	-28.:	0.5	14.6	82.:	1.3	23.8	109.:	-0.8	-9.2	-27.:	

La Jolla Indian Reservation Forest Management Plan Appendix 6 – FVS Inventory Summary

3139 ---La Jolla VRI
 3140
 3141
 3142
 3143 TABLE 2-1 S T O C K A N D S T A N D SUMMARY (PER ACRE)
 3144
 3145

DATE RUN - 02/04/2016
 PLOT ACRES - 10.00
 MEASUREMENT LENGTH - 10.00 YEARS

3146 : - - - - - 2016 S T O C K I N G - - - - - : - - - - - 2016 S T O C K I N G - - - - - :
 3147
 3148 : BASAL CUBIC BOARD % CU % BD : BASAL CUBIC BOARD % CU % BD :
 3149 : TREES AREA FEET FEET DEF DEF : TREES AREA FEET FEET DEF DEF :
 3150
 3151 : --- (351) White alder : --- (542) Velvet ash :
 3152 SEED&SAP 0- 4 : 1230.00 54.651 0.00 0.0 0.00 0.00 : 0.00 0.000 0.00 0.0 0.00 0.00 :
 3153 POLES 6- 9 : 25.00 7.014 51.30 170.5 3.06 0.00 : 4.00 1.162 14.60 58.6 0.00 0.00 :
 3154 SM. SAW 11-16 : 26.00 15.833 303.20 1209.3 0.00 0.00 : 4.00 2.798 51.70 207.6 0.00 0.00 :
 3155 LG. SAW 18-40 : 0.00 0.000 0.00 0.0 0.00 0.00 : 0.00 0.000 0.00 0.0 0.00 0.00 :
 3156 TOTAL : 1281.00 77.498 354.50 1379.8 0.46 0.00 : 8.00 3.960 66.30 266.2 0.00 0.00 :
 3157
 3158 : --- (730) California sycamore : --- (801) Coast live oak :
 3159 SEED&SAP 0- 4 : 0.00 0.000 0.00 0.0 0.00 0.00 : 260.00 1.418 0.00 0.0 0.00 0.00 :
 3160 POLES 6- 9 : 2.00 0.393 0.00 0.0 0.00 0.00 : 3.00 1.047 11.00 43.7 0.00 0.00 :
 3161 SM. SAW 11-16 : 9.00 9.299 199.40 781.1 0.00 0.00 : 11.00 10.554 171.40 657.0 0.00 0.00 :
 3162 LG. SAW 18-40 : 7.00 12.795 331.70 1453.3 0.00 0.00 : 15.00 43.568 1025.50 4630.5 0.00 0.00 :
 3163 TOTAL : 18.00 22.487 531.10 2234.4 0.00 0.00 : 289.00 56.587 1207.90 5331.2 0.00 0.00 :
 3164
 3165 : --- (920) Willow sp. : --- All Hardwood Species :
 3166 SEED&SAP 0- 4 : 200.00 3.600 0.00 0.0 0.00 0.00 : 1690.00 59.668 0.00 0.0 0.00 0.00 :
 3167 POLES 6- 9 : 1.00 0.267 4.70 18.9 0.00 0.00 : 35.00 9.883 81.60 291.7 1.95 0.00 :
 3168 SM. SAW 11-16 : 5.00 3.774 74.50 313.9 0.00 0.00 : 55.00 42.259 800.20 3168.9 0.00 0.00 :
 3169 LG. SAW 18-40 : 1.00 5.241 169.70 772.7 0.00 0.00 : 23.00 61.605 1526.90 6856.5 0.00 0.00 :
 3170 TOTAL : 207.00 12.883 248.90 1105.5 0.00 0.00 : 1803.00 173.415 2408.70 10317.1 0.07 0.00 :
 3171
 3172 : --- All Species Combined :
 3173
 3174 SEED&SAP 0- 4 : 1690.00 59.668 0.00 0.0 0.00 0.00 :
 3175 POLES 6- 9 : 35.00 9.883 81.60 291.7 1.95 0.00 :
 3176 SM. SAW 11-16 : 55.00 42.259 800.20 3168.9 0.00 0.00 :
 3177 LG. SAW 18-40 : 23.00 61.605 1526.90 6856.5 0.00 0.00 :
 3178 TOTAL : 1803.00 173.415 2408.70 10317.1 0.07 0.00 :

La Jolla Indian Reservation Forest Management Plan Appendix 6 – FVS Inventory Summary

---La Jolla VRI

DATE RUN - 02/05/2016
 PLOT ACRES - 10.00
 MEASUREMENT LENGTH - 5.00 YEARS

TABLE 2-2 MEASURED ANNUAL GROWTH (PER ACRE)

2016-2021 MEASURED ANNUAL GROWTH										2016-2021 MEASURED ANNUAL GROWTH																			
:ACCRETION+INGROWTH:--- MORTALITY ---:--- TOTAL GROWTH --										:ACCRETION+INGROWTH:--- MORTALITY ---:--- TOTAL GROWTH --																			
: NET NET :										: NET NET :																			
: BA CU BD :	: BA CU BD :	: BA CU BD :	: BA CU BD :	: BA CU BD :	: BA CU BD :	: BA CU BD :	: BA CU BD :	: BA CU BD :	: BA CU BD :	: BA CU BD :	: BA CU BD :	: BA CU BD :	: BA CU BD :	: BA CU BD :	: BA CU BD :	: BA CU BD :	: BA CU BD :	: BA CU BD :	: BA CU BD :										
: --- (351) White alder										: --- (542) Velvet ash																			
SEED&SAP 0- 4 :	0.5	0.0	0.:	0.1	0.0	0.:	0.4	0.0	0.:	0.0	0.0	0.:	0.0	0.0	0.:	0.0	0.0	0.:	0.:										
POLES 6- 9 :	0.1	1.3	5.:	0.0	0.2	1.:	0.0	1.1	4.:	0.0	0.3	1.:	0.0	0.1	0.:	0.0	0.2	1.:	1.:										
SM. SAW 11-16 :	0.1	3.3	16.:	0.0	0.9	4.:	0.1	2.3	12.:	0.0	0.6	2.:	0.0	0.1	1.:	0.0	0.5	2.:	2.:										
LG. SAW 18-40 :	0.0	0.0	0.:	0.0	0.0	0.:	0.0	0.0	0.:	0.0	0.0	0.:	0.0	0.0	0.:	0.0	0.0	0.:	0.:										
TOTAL :	0.2	4.6	20.:	0.2	1.1	4.:	0.0	3.5	16.:	0.0	0.8	3.:	0.0	0.2	1.:	0.0	0.6	2.:	2.:										
: --- (730) California sycamore										: --- (801) Coast live oak																			
SEED&SAP 0- 4 :	0.0	0.0	0.:	0.0	0.0	0.:	0.0	0.0	0.:	0.1	0.0	0.:	0.0	0.0	0.:	0.1	0.0	0.:	0.:										
POLES 6- 9 :	0.0	0.0	0.:	0.0	0.0	0.:	0.0	0.0	0.:	0.0	0.2	1.:	0.0	0.0	0.:	0.0	0.2	1.:	1.:										
SM. SAW 11-16 :	0.1	1.8	8.:	0.0	0.6	3.:	0.0	1.1	5.:	0.1	1.9	8.:	0.1	1.1	4.:	0.0	0.7	4.:	4.:										
LG. SAW 18-40 :	0.1	1.9	10.:	0.0	0.8	3.:	0.0	1.1	6.:	0.2	6.4	35.:	0.1	2.8	13.:	0.0	3.6	22.:	22.:										
TOTAL :	0.1	3.7	18.:	0.1	1.4	6.:	0.0	2.2	12.:	0.2	8.5	44.:	0.2	4.0	17.:	0.0	4.5	26.:	26.:										
: --- (920) Willow sp.										: --- All Hardwood Species																			
SEED&SAP 0- 4 :	0.1	0.0	0.:	0.0	0.0	0.:	0.1	0.0	0.:	0.7	0.0	0.:	0.2	0.0	0.:	0.5	0.0	0.:	0.:										
POLES 6- 9 :	0.0	0.0	0.:	0.0	0.0	0.:	0.0	0.0	0.:	0.1	1.8	7.:	0.0	0.3	1.:	0.1	1.5	6.:	6.:										
SM. SAW 11-16 :	0.0	0.6	3.:	0.0	0.2	1.:	0.0	0.4	2.:	0.3	8.1	36.:	0.2	3.1	12.:	0.1	5.0	24.:	24.:										
LG. SAW 18-40 :	0.0	0.5	3.:	0.0	0.0	0.:	0.0	0.5	3.:	0.2	8.9	47.:	0.2	3.6	16.:	0.1	5.2	31.:	31.:										
TOTAL :	0.0	1.2	5.:	0.0	0.2	1.:	0.0	0.9	4.:	0.6	18.8	90.:	0.5	7.0	29.:	0.1	11.8	61.:	61.:										
: --- All Species Combined																													
SEED&SAP 0- 4 :	0.7	0.0	0.:	0.2	0.0	0.:	0.5	0.0	0.:																				
POLES 6- 9 :	0.1	1.8	7.:	0.0	0.3	1.:	0.1	1.5	6.:																				
SM. SAW 11-16 :	0.3	8.1	36.:	0.2	3.1	12.:	0.1	5.0	24.:																				
LG. SAW 18-40 :	0.2	8.9	47.:	0.2	3.6	16.:	0.1	5.2	31.:																				
TOTAL :	0.6	18.8	90.:	0.5	7.0	29.:	0.1	11.8	61.:																				

La Jolla Indian Reservation Forest Management Plan Appendix 6 – FVS Inventory Summary

3223 ---La Jolla MHC-SMC
 3224
 3225
 3226
 3227 TABLE 2-1 S T O C K A N D S T A N D SUMMARY (PER ACRE)

DATE RUN - 02/05/2016
 PLOT ACRES - 17.00
 MEASUREMENT LENGTH - 10.00 YEARS

3228
 3229 : - - - - - 2016 S T O C K I N G - - - - - : - - - - - 2016 S T O C K I N G - - - - - :
 3230
 3231 : BASAL CUBIC BOARD % CU % BD : BASAL CUBIC BOARD % CU % BD :
 3232 : TREES AREA FEET FEET DEF DEF : TREES AREA FEET FEET DEF DEF :
 3233
 3234 : --- (202) Douglas-fir : --- (801) Coast live oak :
 3235 SEED&SAP 0- 4 : 5.88 0.032 0.00 0.0 0.00 0.00 : 100.00 0.545 0.00 0.0 0.00 0.00 :
 3236 POLES 6- 9 : 0.59 0.115 0.00 0.0 0.00 0.00 : 1.76 0.526 3.88 15.5 0.00 0.00 :
 3237 SM. SAW 11-16 : 8.24 6.404 61.29 447.1 12.07 0.00 : 5.88 4.575 56.59 212.6 2.65 0.00 :
 3238 LG. SAW 18-40 : 15.88 93.956 2698.47 17932.4 2.12 0.00 : 8.82 30.296 755.71 3933.6 6.87 0.00 :
 3239 TOTAL : 30.59 100.507 2759.76 18379.4 2.37 0.00 : 116.47 35.943 816.18 4161.6 6.56 0.00 :
 3240
 3241 : --- (805) Canyon live oak : --- (818) California black oak :
 3242 SEED&SAP 0- 4 : 347.06 1.893 0.00 0.0 0.00 0.00 : 0.00 0.000 0.00 0.0 0.00 0.00 :
 3243 POLES 6- 9 : 6.47 1.623 11.94 47.6 0.00 0.00 : 0.00 0.000 0.00 0.0 0.00 0.00 :
 3244 SM. SAW 11-16 : 7.06 6.600 101.94 422.1 10.20 0.00 : 0.00 0.000 0.00 0.0 0.00 0.00 :
 3245 LG. SAW 18-40 : 1.76 4.328 113.53 513.6 0.00 0.00 : 0.59 1.283 34.82 158.1 0.00 0.00 :
 3246 TOTAL : 362.35 14.444 227.41 983.4 4.85 0.00 : 0.59 1.283 34.82 158.1 0.00 0.00 :
 3247
 3248 : --- All Softwood Species : --- All Hardwood Species :
 3249 SEED&SAP 0- 4 : 5.88 0.032 0.00 0.0 0.00 0.00 : 447.06 2.438 0.00 0.0 0.00 0.00 :
 3250 POLES 6- 9 : 0.59 0.115 0.00 0.0 0.00 0.00 : 8.24 2.150 15.82 63.1 0.00 0.00 :
 3251 SM. SAW 11-16 : 8.24 6.404 61.29 447.1 12.07 0.00 : 12.94 11.175 158.53 634.6 7.65 0.00 :
 3252 LG. SAW 18-40 : 15.88 93.956 2698.47 17932.4 2.12 0.00 : 11.18 35.908 904.06 4605.3 5.81 0.00 :
 3253 TOTAL : 30.59 100.507 2759.76 18379.4 2.37 0.00 : 479.41 51.670 1078.41 5303.1 6.01 0.00 :
 3254
 3255 : --- All Species Combined :
 3256 SEED&SAP 0- 4 : 452.94 2.470 0.00 0.0 0.00 0.00 :
 3257 POLES 6- 9 : 8.82 2.265 15.82 63.1 0.00 0.00 :
 3258 SM. SAW 11-16 : 21.18 17.578 219.82 1081.7 8.92 0.00 :
 3259 LG. SAW 18-40 : 27.06 129.863 3602.53 22537.6 3.07 0.00 :
 3260 TOTAL : 510.00 152.177 3838.18 23682.5 3.42 0.00 :
 3261

La Jolla Indian Reservation Forest Management Plan Appendix 6 – FVS Inventory Summary

---La Jolla MHC-SMC

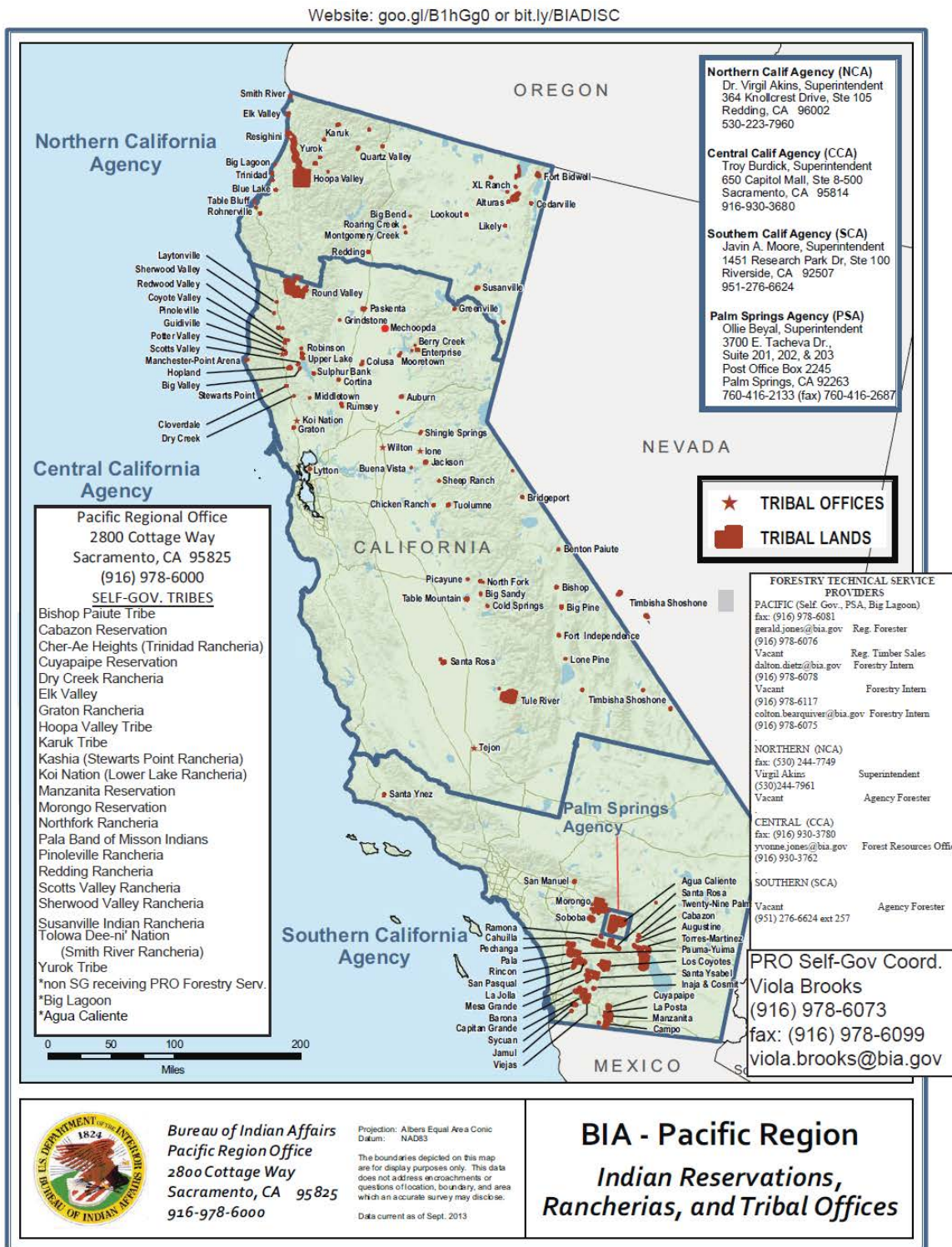
DATE RUN - 02/05/2016
 PLOT ACRES - 17.00
 MEASUREMENT LENGTH - 5.00 YEARS

TABLE 2-2 MEASURED ANNUAL GROWTH (PER ACRE)

2016-2021 MEASURED ANNUAL GROWTH										2016-2021 MEASURED ANNUAL GROWTH									
: ACCRETION+INGROWTH:--- MORTALITY ---:--- TOTAL GROWTH --:										: ACCRETION+INGROWTH:--- MORTALITY ---:--- TOTAL GROWTH --:									
: : NET NET :										: : NET NET :									
: BA CU BD :	: BA CU BD :	: BA CU BD :	: BA CU BD :	: BA CU BD :	: BA CU BD :	: BA CU BD :	: BA CU BD :	: BA CU BD :	: BA CU BD :	: BA CU BD :	: BA CU BD :	: BA CU BD :	: BA CU BD :	: BA CU BD :	: BA CU BD :	: BA CU BD :	: BA CU BD :	: BA CU BD :	: BA CU BD :
: --- (202) Douglas-fir										: --- (801) Coast live oak									
SEED&SAP 0- 4 :	0.0	0.0	0.:	0.0	0.0	0.:	0.0	0.0	0.:	0.1	0.0	0.:	0.0	0.0	0.:	0.1	0.0	0.:	0.:
POLES 6- 9 :	0.0	0.0	0.:	0.0	0.0	0.:	0.0	0.0	0.:	0.0	0.1	0.:	0.0	0.0	0.:	0.0	0.1	0.:	0.:
SM. SAW 11-16 :	0.1	1.3	7.:	0.0	0.1	1.:	0.1	1.2	6.:	0.0	0.9	4.:	0.0	0.1	0.:	0.0	0.8	3.:	3.:
LG. SAW 18-40 :	0.5	13.9	105.:	0.0	0.9	6.:	0.4	13.0	100.:	0.1	4.0	24.:	0.0	0.8	4.:	0.1	3.2	20.:	20.:
TOTAL :	0.5	15.1	112.:	0.0	1.0	6.:	0.5	14.1	106.:	0.1	5.0	28.:	0.0	0.9	5.:	0.1	4.1	23.:	23.:
: --- (805) Canyon live oak										: --- (818) California black oak									
SEED&SAP 0- 4 :	0.1	0.0	0.:	0.0	0.0	0.:	0.1	0.0	0.:	0.0	0.0	0.:	0.0	0.0	0.:	0.0	0.0	0.:	0.:
POLES 6- 9 :	0.0	0.2	1.:	0.0	0.0	0.:	0.0	0.2	1.:	0.0	0.0	0.:	0.0	0.0	0.:	0.0	0.0	0.:	0.:
SM. SAW 11-16 :	0.0	1.1	5.:	0.0	0.3	1.:	0.0	0.9	4.:	0.0	0.0	0.:	0.0	0.0	0.:	0.0	0.0	0.:	0.:
LG. SAW 18-40 :	0.0	0.7	3.:	0.0	0.2	1.:	0.0	0.4	2.:	0.0	0.2	1.:	0.0	0.1	0.:	0.0	0.1	1.:	1.:
TOTAL :	0.1	2.0	10.:	0.0	0.5	2.:	0.0	1.5	7.:	0.0	0.2	1.:	0.0	0.1	0.:	0.0	0.1	1.:	1.:
: --- All Softwood Species										: --- All Hardwood Species									
SEED&SAP 0- 4 :	0.0	0.0	0.:	0.0	0.0	0.:	0.0	0.0	0.:	0.3	0.0	0.:	0.0	0.0	0.:	0.3	0.0	0.:	0.:
POLES 6- 9 :	0.0	0.0	0.:	0.0	0.0	0.:	0.0	0.0	0.:	0.0	0.3	1.:	0.0	0.0	0.:	0.0	0.2	1.:	1.:
SM. SAW 11-16 :	0.1	1.3	7.:	0.0	0.1	1.:	0.1	1.2	6.:	0.1	2.0	9.:	0.0	0.4	1.:	0.0	1.7	8.:	8.:
LG. SAW 18-40 :	0.5	13.9	105.:	0.0	0.9	6.:	0.4	13.0	100.:	0.1	4.9	28.:	0.1	1.2	6.:	0.1	3.7	23.:	23.:
TOTAL :	0.5	15.1	112.:	0.0	1.0	6.:	0.5	14.1	106.:	0.2	7.2	39.:	0.1	1.6	8.:	0.1	5.6	31.:	31.:
: --- All Species Combined																			
SEED&SAP 0- 4 :	0.3	0.0	0.:	0.0	0.0	0.:	0.3	0.0	0.:										
POLES 6- 9 :	0.0	0.3	1.:	0.0	0.0	0.:	0.0	0.2	1.:										
SM. SAW 11-16 :	0.2	3.3	16.:	0.0	0.5	2.:	0.1	2.8	14.:										
LG. SAW 18-40 :	0.6	18.7	134.:	0.1	2.1	12.:	0.5	16.7	122.:										
TOTAL :	0.8	22.3	151.:	0.1	2.6	14.:	0.6	19.7	137.:										

3305

APPENDIX 7 – INDIAN TRUST LAND BY COUNTY AND AGENCY



* PRO Forestry provides technical services for this Tribe through the Superintendents and Self-Determination awards

Figure App 7-1. BIA Pacific Region Reservations, Rancherias, and Tribal Offices

3306

3307

APPENDIX 8 – NRCS COOPERATIVE FMP EXCERPTS

Introduction and Contents: In 2017 the Tribe completed a California Cooperative Management Plan that was submitted to and approved by the NRCS. Since the NRCS Plan is focused on management of the Reservation's natural resources, including its forests, it was felt important that the critical parts of the NRCS Plan be included in this Bureau of Indian Affairs-compliant FMP as well. Inclusion of these sections of the NRCS Plan will allow Tribal managers to identify proposed projects and demonstrate to oversight agencies such as the BIA particular projects and the specifications for those projects that are proposed on the Reservation.

(Although this section is inclusive of much of the critical information and data in the NRCS Plan, if questions arise the full La Jolla California Cooperative Management Plan (BBW & Associates, 12-2-16) should be consulted.)

The NRCS Plan has seven sections as summarized below:

Section I divides the LJIR into four Land Units for management planning purposes. It has maps of each Land Unit along with vegetation types and tree species, acreages, management objectives, detailed descriptions of the terrain and vegetation, stand improvement needs, and resource concerns and recommendations.

Section II has a large table of Management Activity Decisions, Schedules, and Tracking. This table shows proposed projects by Management Units, Acres, NRCS Practice Codes, Planned Start and Completion Dates, Cost Shares, and Cash Flow.

Section III is a discussion of Planned Management Activities and Required Permits, including Management Recommendations, Harvest Documents, and Monitoring.

Section IV has a discussion of the Requirements for Project Compliance with both Federal and State environmental regulations, i.e., NEPA and CEQA.

Section V includes a list of Additional Professional Assistance sources such as California Cooperative Extension, CAL FIRE, California Dept. of Fish and Wildlife (CDFW), and others.

Section VI (NRCS Appendix 1) is an Overview of Standards and Specifications, and

Section VII (NRCS Appendix 2) provides Specifications for Specific Treatments, including Fuelbreak Installation, Understory Thinning, Slash Treatment, and others.

NRCS RESOURCE MANAGEMENT UNIT INFORMATION

Land Unit #1: North Unit

WHR Vegetation Types: Coastal Oak Woodland (COW), Valley Foothill Riparian (VRI), and Montane Hardwood-Conifer (MHC).

Acres: 1,250 acres total; 767 acres forested (668 acres COW, 45 acres VRI, 54 acres MHC).

Location: This unit includes native forest and chaparral on Tribal trust lands north and northeast of the Cuca Ranch inholding to the northern boundary of the Reservation. Included are areas of native forest that are currently being used for Tribal member housing, cemeteries, and grazing. The steeper portions of this unit are expected to remain in a natural state and to be managed primarily for watershed protection, open space, wildlife habitat, hunting, and grazing (see NRCS Land Unit 1 Vegetation Map below).

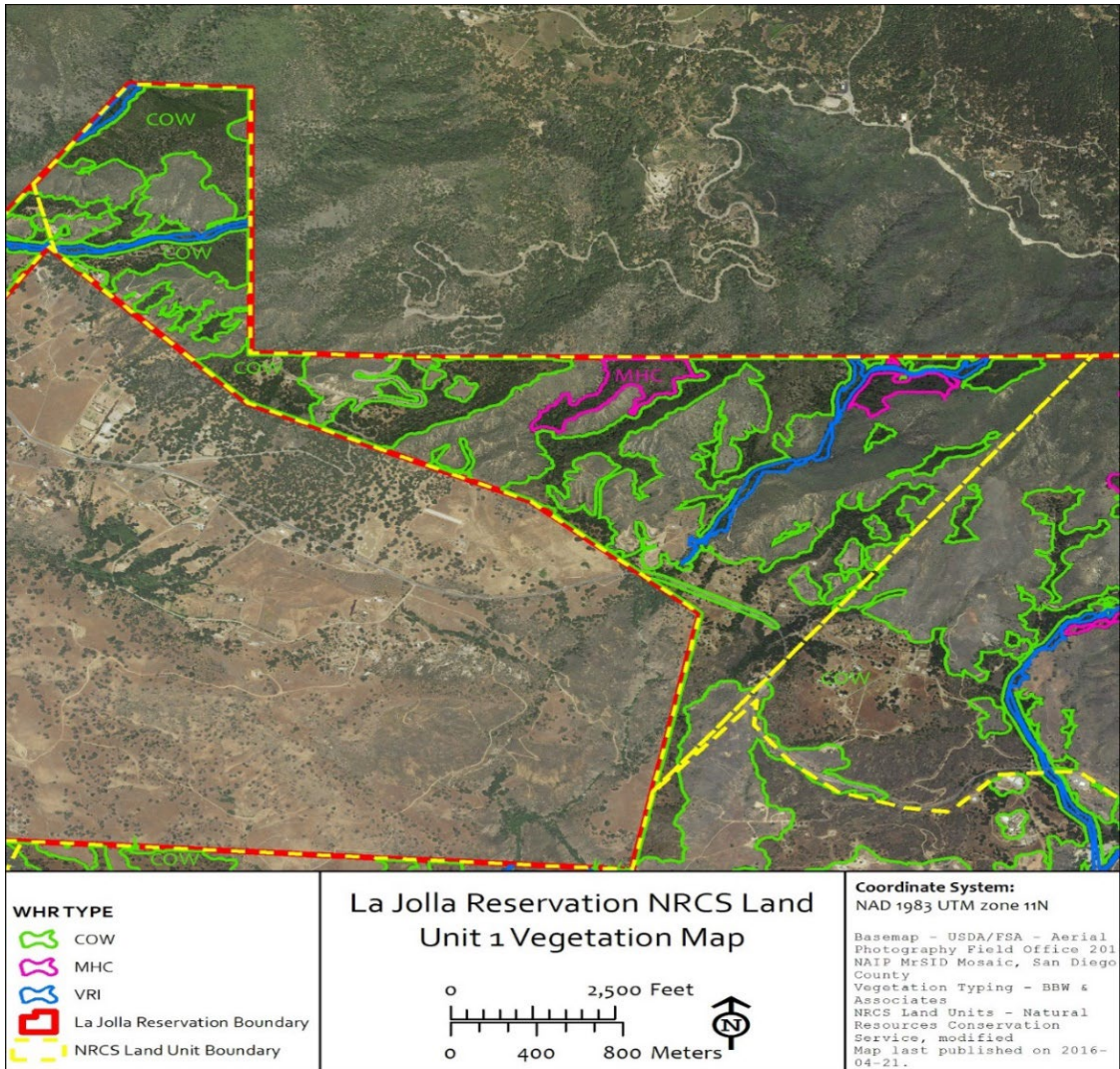


Figure App 8-1. NRCS Land Unit 1 Vegetation Map

3348 **Stand history, age, and desired rotation cycle:**

3349 The only vegetation type in this unit that has commercially valuable conifers is inaccessible by road, so
3350 no logging has occurred. The Tribe does not keep records of past harvests, so it is unknown where or
3351 when hardwood harvests have occurred.

3352 Based on the Fire History map, portions of this unit burned in 1917, 1931, 1934, 1947, and 1999. Most
3353 of it also burned in the 2007 Poomacha Fire. The severity of these fires is unknown, but the Poomacha
3354 Fire appears to have burned the chaparral intensively and the forest severely in some areas and less
3355 severely in others.

3356 It is likely that in the past decade, due to drought and the effects of the Poomacha Fire, conifer mortality
3357 has accelerated and has caused a significant decline in overall stand growth.

3358 **Tree species present, forest type and/or ecological site description (ESD):**

3359 There are three WHR forest types in Unit #1, Coastal Oak Woodland (COW), Valley Foothill Riparian
3360 (VRI), and Montane Hardwood-Conifer (MHC). Coast live oak is the dominant tree species in the COW
3361 type in this unit, although there are also canyon live oaks and occasionally California black oaks.
3362 Bigcone Douglas-fir is the dominant conifer in the MHC type, which includes incense cedar, coast, and
3363 canyon live oak, and occasionally California black oaks. In the VRI type, coast live oak and canyon live
3364 oak are the dominant tree species, but white alder is also found. Refer to Current Property Conditions,
3365 Forest Infrastructure, Forest Types (page 14) for a more detailed description of each of the WHR types
3366 found in Unit #1.

3367 **Site index, soil type, elevation, and slope:**

3368 Site index was assigned based on regional data; for COW at 40 feet at 50 years, for MHC at 50 feet at
3369 50 years, and for VRI at 60 feet at 50 years (DeLasaux and Pillsbury, 1987). The importance of site
3370 index to this assessment is that assigned site index was used to estimate growth and mortality based
3371 on regional data.

3372 Based on the NRCS soil survey, the forested portion of Unit #1 is primarily underlain by Tollhouse rocky
3373 coarse sandy loam, 30-65% slopes (**ToG** - residuum weathered from granodiorite) with an extremely
3374 low available water content (AWC ~1.8 inches).

3375 Elevations in this unit range from about 2700 to 4720 feet.

3376 **DBH/size class, basal area, trees/acre, stocking, growth/yield potential:**

3377 The results of FVS runs of inventory data for the three WHR types found in Unit #1 are summarized in
3378 Table 2 Reservation-Wide Conifer and Hardwood Stocking (page 21) and Table 3 Reservation-Wide
3379 Conifer and Hardwood Growth (page 22). The complete tables are shown in Appendix 6. These FVS
3380 summaries show, by species: DBH/size class, basal area/acre, trees/acre, board feet and cubic
3381 feet/acre, stocking, growth/yield potential, and other stand parameters. The runs were for all plots
3382 inventoried during the 2016 field work and are not specific to a Unit.

Regeneration and stand improvement need:

Because the woodlands have limited commercial value and are not being actively managed, only a limited amount of forest development is proposed, most of which is associated with improving the health, vigor, and fire resiliency of tree stands, particularly in the vicinity of residential areas. It would be beneficial from a stand health, vigor, growth, fire resiliency, and riparian flow enhancement standpoint to thin low-vigor, unhealthy trees in all crown classes (see Management Plan Implementation, Fire Protection, page 48).

Riparian, meadows, aquatic habitat, stream, and other watercourses:

Plaisted Creek, which flows southwesterly off the Reservation into Potrero Creek and eventually into San Luis Rey River, and several unnamed seasonal creeks, flow through this unit. The quality of water in these creeks is unknown and the quantity is limited at certain times of the year.

Understory, downed woody debris, snags, wildlife habitat:

Unit #1 is dominated by the COW type, which tends to be densest near seasonal watercourses. Understory trees and shrubs are minimal in this unit due to the dense tree canopy. Downed woody debris in general consists of scattered broken limbs, twigs, and leaves. The COW type provides habitat for a variety of wildlife species. Barrett (1980) reports that at least 60 species of mammals may use oaks in some way. Verner (1980) reports 110 species of birds observed during the season in California habitats where oaks form a significant part of the canopy or subcanopy. Quail, turkeys, squirrels, and deer may be so dependent on acorns in fall and early winter that a poor acorn year can result in significant declines in their populations (Duncan and Shields 1966). The riparian woodlands along Plaisted Creek and the unnamed creek near the eastern boundary of the unit may provide important habitat for the endangered least Bell's vireo and other sensitive bird species, including the southwestern willow flycatcher, western, yellow-billed cuckoo, yellow warbler, and yellow-breasted chat.

Unit Management Resource Concerns and Recommendations

Erosion concerns:

Based on the NRCS soil survey:

ToG, CuG, and SpG2 soils have a severe hazard of off-road or off-trail erosion, a severe hazard of erosion on roads and trails, and are poorly suited for natural surface roads.

HnG soils have a moderate hazard of off-road or off-trail erosion, a severe hazard of erosion on roads and trails, and are poorly suited for natural surface roads.

3413 **Domestic uses:**

3414 Residential living and livestock grazing are the main uses of Unit #1

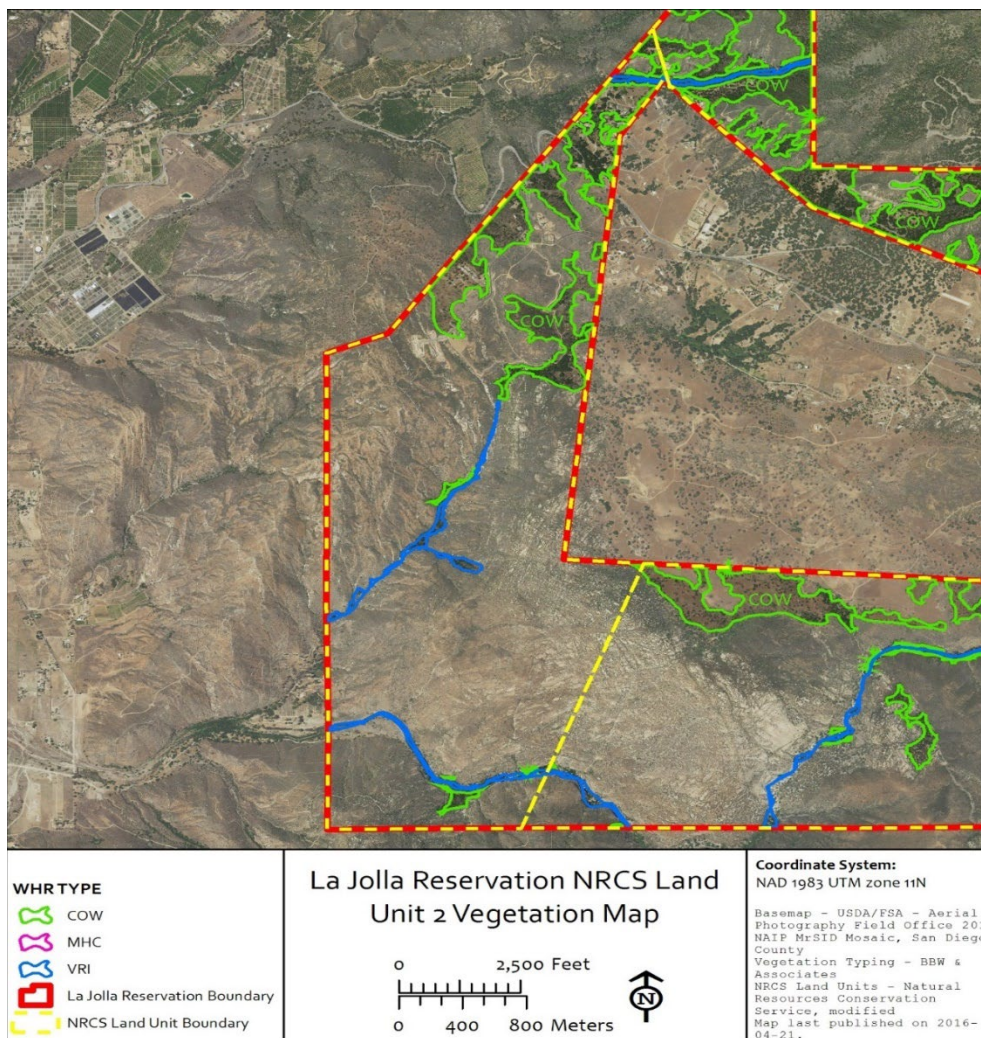


Figure App 8-2. NRCS Land Unit 2 Vegetation Map

3418 **Land Unit #2: West Unit**

3419 **WHR Vegetation Types:** Coastal Oak Woodland (COW) and Valley Foothill Riparian (VRI).

3420 **Acres:** 1,779 acres total; 291 acres forested (238 acres COW and 53 acres VRI).

3421 **Location:** Land Unit #2 includes native forest and chaparral on Tribal trust lands. The gentle terrain in
3422 the northern leg of this unit is currently occupied by Tribal member housing. The steeper terrain to the
3423 south of the housing development, which is sparsely forested or is chaparral, is inaccessible by vehicle
3424 due to a lack of roads. This area is expected to remain in a natural state and be managed primarily for
3425 watershed protection, open space, wildlife habitat, hunting, and grazing (see NRCS Land Unit 2
3426 Vegetation Map below).

3427 **Description**

3428 **Stand history, age, and desired rotation cycle:**

3429 The Tribe does not keep records of past harvests, so it is unknown where or when hardwood harvests
3430 have occurred. There is no MHC vegetation type in Unit #2 and no conifers were observed during the
3431 2016 inventory.

3432 Based on the Fire History map, portions of this unit burned in 1924, 1962, 1987, and 2003. Most of it
3433 also burned in the 2007 Poomacha Fire. The severity of these fires is unknown, but the Poomacha Fire
3434 appears to have burned the chaparral intensively and the forest severely in some areas and less
3435 severely in others.

3436 It is likely that in the past decade, due to drought and the effects of the Poomacha Fire, hardwood
3437 mortality has accelerated and has caused a significant decline in overall stand growth.

3438 **Tree species present, forest type and/or ecological site description (ESD):**

3439 There are two WHR forest types in Unit #2, Coastal Oak Woodland (COW) and Valley Foothill Riparian
3440 (VRI). Coast live oak is the dominant tree species in the COW type in this unit, although there are also
3441 canyon live oaks and occasionally Engelmann and California black oaks. In the VRI type, coast live oak
3442 and canyon live oak are the dominant tree species, but white alder, willow, and California sycamore is
3443 also found. Refer to Current Property Conditions, Forest Infrastructure, Forest Types (page 14) for a
3444 more detailed description of each of the WHR types found in Unit #2.

3445

3446

3447 **Site index, soil type, elevation, and slope:**

3448 Site index was assigned based on regional data; for COW at 40 feet at 50 years, for MHC at 50 feet at
3449 50 years, and for VRI at 60 feet at 50 years (DeLasaux and Pillsbury, 1987). The importance of site

index to this assessment is that assigned site index was used to estimate growth and mortality based on regional data.

Based on the NRCS soil survey, the forested portion of Unit #2 is primarily underlain by HnE, HnG, and FaE2 soils. Holland stony fine sandy loam, 5-30% slopes (**HnE** and **HnG** - residuum weathered from mica schist) has a low available water content to a depth of 60 inches. Fallbrook sandy loam, 15-30% slopes, eroded (**FaE2** - residuum weathered from granodiorite) has a low available water content to the depth of a restrictive layer. Elevations in this unit range from about 880 to 4400 feet.

DBH/size class, basal area, trees/acre, stocking, growth/yield potential:

The results of FVS runs of inventory data for the two WHR types found in Unit #2 are summarized in Table 2 Reservation-Wide Conifer and Hardwood Stocking (page 21) and Table 3 Reservation-Wide Conifer and Hardwood Growth (page 22). The complete tables are shown in Appendix 6. These FVS summaries show, by species: DBH/size class, basal area/acre, trees/acre, board feet and cubic feet/acre, stocking, growth/yield potential, and other stand parameters. The runs were for all plots inventoried during the 2016 field work (none in Unit #2) and are not specific to a Unit.

Regeneration and stand improvement need:

Because the woodlands have limited commercial value and are not being actively managed, only a limited amount of forest development is proposed, most of which is associated with improving the health, vigor, and fire resiliency of tree stands, particularly in the vicinity of residential areas. It would be beneficial from a stand health, vigor, growth, fire resiliency, and riparian flow enhancement standpoint to thin low-vigor, unhealthy trees in all crown classes (see Management Plan Implementation, Fire Protection, page 48).

Riparian, meadows, aquatic habitat, stream, and other watercourses:

San Luis Rey River flows westerly through the southern portion of Unit #2 and an unnamed tributary that drains most of the Unit runs south through the middle of the Unit to join San Luis Rey River west of the Reservation. Several other watercourses, which flow into Plaisted Creek, drain the northernmost portion of the Unit. The quality of water in the river and in these creeks is unknown and the quantity is limited at certain times of the year.

Understory, downed woody debris, snags, wildlife habitat:

The Unit #2 forest is dominated by the COW type, which tends to be densest near seasonal watercourses. Understory trees and shrubs are minimal where the tree canopy is dense. Downed woody debris in general consists of scattered broken limbs, twigs, and leaves. The COW type provides habitat for a variety of wildlife species. Barrett (1980) reports that at least 60 species of mammals may use oaks in some way. Verner (1980) reports 110 species of birds observed during the season in California habitats where oaks form a significant part of the canopy or subcanopy. Quail, turkeys, squirrels, and deer may be so dependent on acorns in fall and early winter that a poor acorn year can

result in significant declines in their populations (Duncan and Shields 1966). The riparian woodlands along San Luis Rey River and the unnamed creek that drains into it may provide important habitat for the endangered least Bell's vireo and other sensitive bird species, including the southwestern willow flycatcher, western, yellow-billed cuckoo, yellow warbler, and yellow-breasted chat.

Unit Management Resource Concerns and Recommendations

Erosion concerns:

Based on the NRCS soil survey:

HnE, HnG, and FaE2 soils have a moderate hazard of off-road or off-trail erosion, a severe hazard of erosion on roads and trails, and are poorly suited for natural surface roads.

Domestic uses:

Residential living is the main Tribal use of Unit #2

Land Unit #3: Northeast Unit

WHR Vegetation Types: Coastal Oak Woodland (COW), Valley Foothill Riparian (VRI), and Montane Hardwood-Conifer (MHC).

Acres: 2,098 acres total; 718 acres forested (429 acres COW, 90 acres VRI, and 199 acres MHC).

Location: Land Unit #3 includes native forest and chaparral on Tribal trust lands. Included are areas of native forest that are currently being used or have traditionally been used for Tribal member housing, religious and ceremonial purposes, and cemeteries. This unit is bounded on the south by State Route 76 and includes the steep terrain up to the northern boundary of the Reservation. Most of the steep area is expected to remain in a natural state and be managed primarily for watershed protection, open space, wildlife habitat, hunting, limited grazing, and Tribal member recreation (see NRCS Land Unit 3 Vegetation Map below).

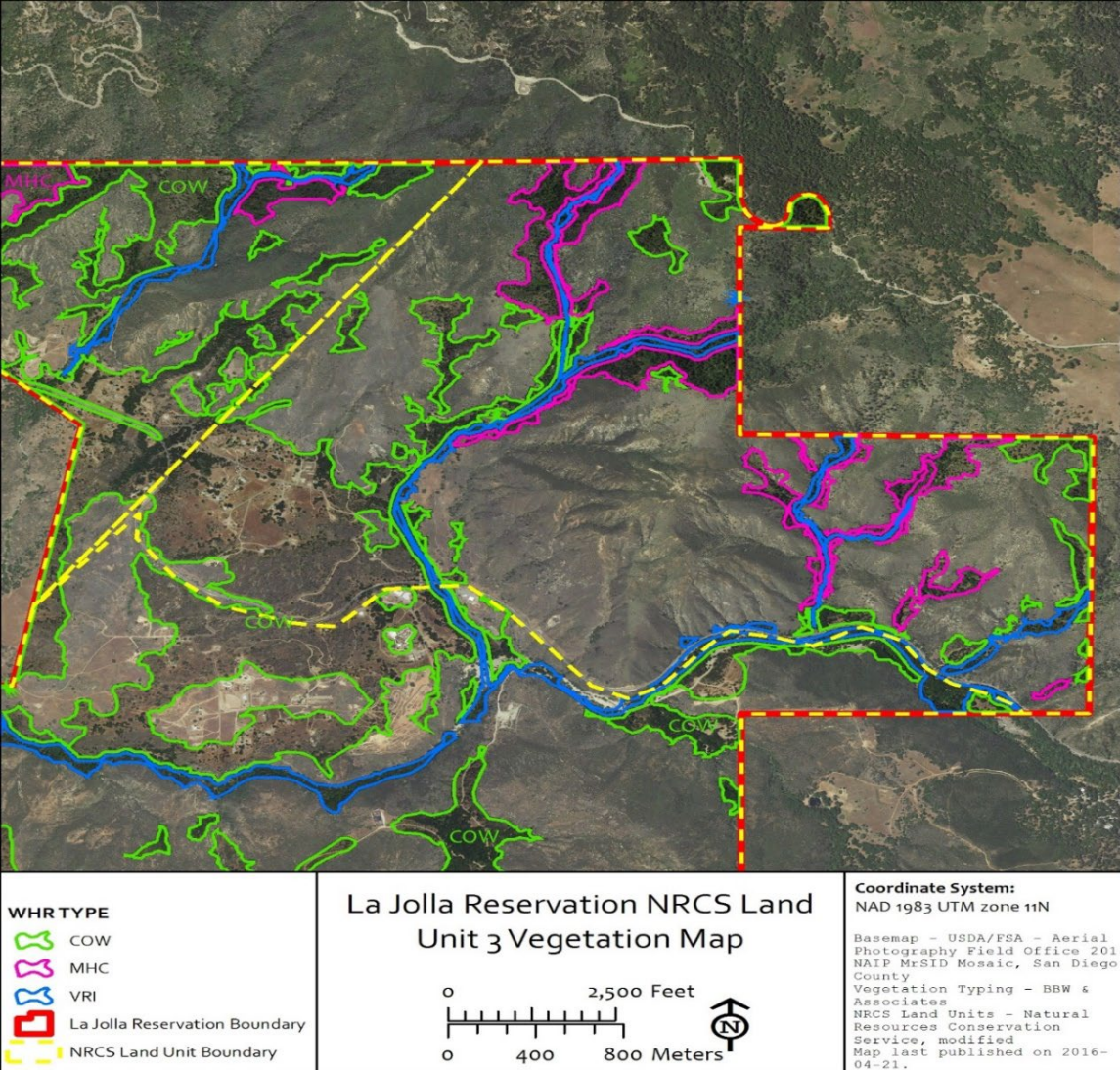


Figure App 8-3. NRCS Land Unit 3 Vegetation Map

Description

Stand history, age, and desired rotation cycle:

The only vegetation type (MHC) in this unit that has commercially valuable conifers is inaccessible by road, so no logging has occurred. The Tribe does not keep records of past harvests, so it is unknown where or when conifer or hardwood harvests have occurred.

Based on the Fire History map, portions of this unit burned in 1917, 1929, 1934, 1947, and 1999. Most of it burned in the 2007 Poomacha Fire. The severity of these fires is unknown, but the Poomacha Fire appears to have burned the chaparral intensively and the forest severely in some areas and less severely in others. In the east branch of Cedar Creek most of the conifers survived the fire. It is likely that in the past decade, due to drought and the effects of the Poomacha Fire, conifer mortality has accelerated and has caused a significant decline in overall stand growth.

Tree species present, forest type and/or ecological site description (ESD):

There are three WHR forest types in Unit #3, Coastal Oak Woodland (COW), Valley Foothill Riparian (VRI), and Montane Hardwood-Conifer (MHC). Coast live oak is the dominant tree species in the COW type in this unit, although there are also canyon live oaks and occasionally California black oaks. Bigcone Douglas-fir is the dominant conifer in the MHC type and coast live oak the dominant hardwood. There are also scattered incense cedars, coast live oaks, and occasionally California black oaks. In the VRI type, coast live oak and canyon live oak are the dominant tree species, but white alder is also found. Refer to Current Property Conditions, Forest Infrastructure, Forest Types (page 14) for a more detailed description of each of the WHR types found in Unit #3.

Site index, soil type, elevation, and slope:

Site index was assigned based on regional data; for COW at 40 feet at 50 years, for MHC at 50 feet at 50 years, and for VRI at 60 feet at 50 years (DeLasaux and Pillsbury, 1987). The importance of site index to this assessment is that assigned site index was used to estimate growth and mortality based on regional data.

Based on the NRCS soil survey, the forested portion of Unit #3 is primarily underlain by ToG, HnE, and CuG soils. Tollhouse rocky coarse sandy loam, 30-65% slopes (**ToG** - residuum weathered from granodiorite) with an extremely low available water content (AWC ~1.8 inches). Holland stony fine sandy loam, 5-30% slopes (**HnE** - residuum weathered from mica schist) has a low available water content to the depth of a restrictive layer. Crouch rocky coarse sandy loam, 30-70% slopes (**CuG** - residuum weathered from mica schist) has a low available water content to the depth of a restrictive layer. Elevations in this unit range from about 2280 to 5140 feet.

DBH/size class, basal area, trees/acre, stocking, growth/yield potential

The results of FVS runs of inventory data for the three WHR types found in Unit #3 are summarized in Table 2 Reservation-Wide Conifer and Hardwood Stocking (page 21) and Table 3 Reservation-Wide Conifer and Hardwood Growth (page 22). The complete tables are shown in Appendix 6. These FVS summaries show, by species: DBH/size class, basal area/acre, trees/acre, board feet and cubic feet/acre, stocking, growth/yield potential, and other stand parameters. The runs were for all plots inventoried during the 2016 field work, many of which were in this Unit, especially in the MHC type, but are not specific to this Unit.

Regeneration and stand improvement need:

Although there is considerable conifer stocking within the MHC type, it is inaccessible by roads, so it is unlikely that any commercial harvest could be conducted within this type in this unit. Harvest of hardwoods, however, could achieve some economy of scale due to the excellent stocking of hardwoods in many stands. At present, because there is no stated Tribal plan to harvest timber products, harvest of individual trees for cultural uses or in conjunction with forest health projects and/or riparian flow enhancement projects is the most likely activity in this unit.

Because the woodlands have limited commercial value and are not being actively managed, only a limited amount of forest development is proposed, most of which is associated with improving the health, vigor, and fire resiliency of tree stands, particularly in the vicinity of residential areas. It would be beneficial from a stand health, vigor, growth, fire resiliency, and riparian flow enhancement standpoint to thin low-vigor, unhealthy trees in all crown classes (see Management Plan Implementation, Fire Protection, page 48).

Riparian, meadows, aquatic habitat, stream, and other watercourses:

Cedar Creek, which flows southwesterly into San Luis Rey River, and several unnamed seasonal creeks, flow through this unit. The quality of water in these creeks is unknown and the quantity is limited at certain times of the year.

Understory, downed woody debris, snags, wildlife habitat:

Unit #3 is dominated by the MHC type, which burned in the Poomacha Fire. Most of the conifers show evidence of the fire, with charring on the lower trunks and some mortality to lower branches. Shrubs are dense and tall in a portion of the area occupied by this type. In other areas shrubs are sparse and the ground cover is grass and/or forbs. The COW type tends to be densest near seasonal watercourses. Downed woody debris in general consists of scattered broken limbs, twigs, and leaves.

Both the MHC and the COW types provide habitat for a variety of wildlife species. Barrett (1980) reports that at least 60 species of mammals may use oaks in some way. Verner (1980) reports 110 species of birds observed during the season in California habitats where oaks form a significant part of the canopy or subcanopy. Quail, turkeys, squirrels, and deer may be so dependent on acorns in fall and early winter that a poor acorn year can result in significant declines in their populations (Duncan and Shields 1966). The riparian woodlands along Cedar Creek and the unnamed creeks in the eastern leg of this Unit may provide important habitat for the endangered least Bell's vireo and other sensitive bird species, including the southwestern willow flycatcher, western, yellow-billed cuckoo, yellow warbler, and yellow-breasted chat.

Unit Management Resource Concerns and Recommendations:

Erosion concerns:

Based on the NRCS soil survey:

ToG and CuG soils have a severe hazard of off-road or off-trail erosion, a severe hazard of erosion on roads and trails, and are poorly suited for natural surface roads.

HnG soils have a moderate hazard of off-road or off-trail erosion, a severe hazard of erosion on roads and trails, and are poorly suited for natural surface roads.

Where Cedar Creek Road cross watercourses or at ditch relief culverts there is a high likelihood that, without periodic maintenance, eventually one or more culverts will become plugged or otherwise fail, potentially resulting in diversion of water down the road, causing extensive damage to the road prism

and potentially hill slopes and watercourses. Where gullying, rilling, or soft surfaces are problems, drainage structures (rolling dips, waterbars, culverts, ditches) should be installed, to remove water quickly from the road surface, and gravel should be installed where needed to provide for a stable travel surface. Use of native surface roads should be limited to dry periods or to periods when road surfaces will not be adversely affected by vehicle traffic.

Domestic uses:

Residential living, livestock grazing, hunting, firewood gathering, and water supply are the main uses of Unit #3

Land Unit #4: South Unit

WHR Vegetation Types: Coastal Oak Woodland (COW) and Valley Foothill Riparian (VRI).

Acres: 3,773 acres total; 938 acres forested (809 acres COW) and 129 acres VRI).

Location: Land Unit #4 includes native forest and chaparral on Tribal trust lands. Included are areas of native forest that are currently being used or have traditionally been used for Tribal member housing, Tribal administrative purposes, religious and ceremonial purposes, cemeteries, and camping and day use by Tribal members and visitors. It also includes a three-tier zip line and a motocross track that is used by Tribal members and visitors. Most of the area south of Cuca Ranch and San Luis Rey River is expected to largely remain in a natural state and be managed primarily for open space, wildlife, hunting, grazing, and Tribal member, and visitor recreation. This unit includes relatively gentle terrain in much of the area north of San Luis Rey River and steeper terrain south of it (see NRCS Land Unit 4 Vegetation Map below).

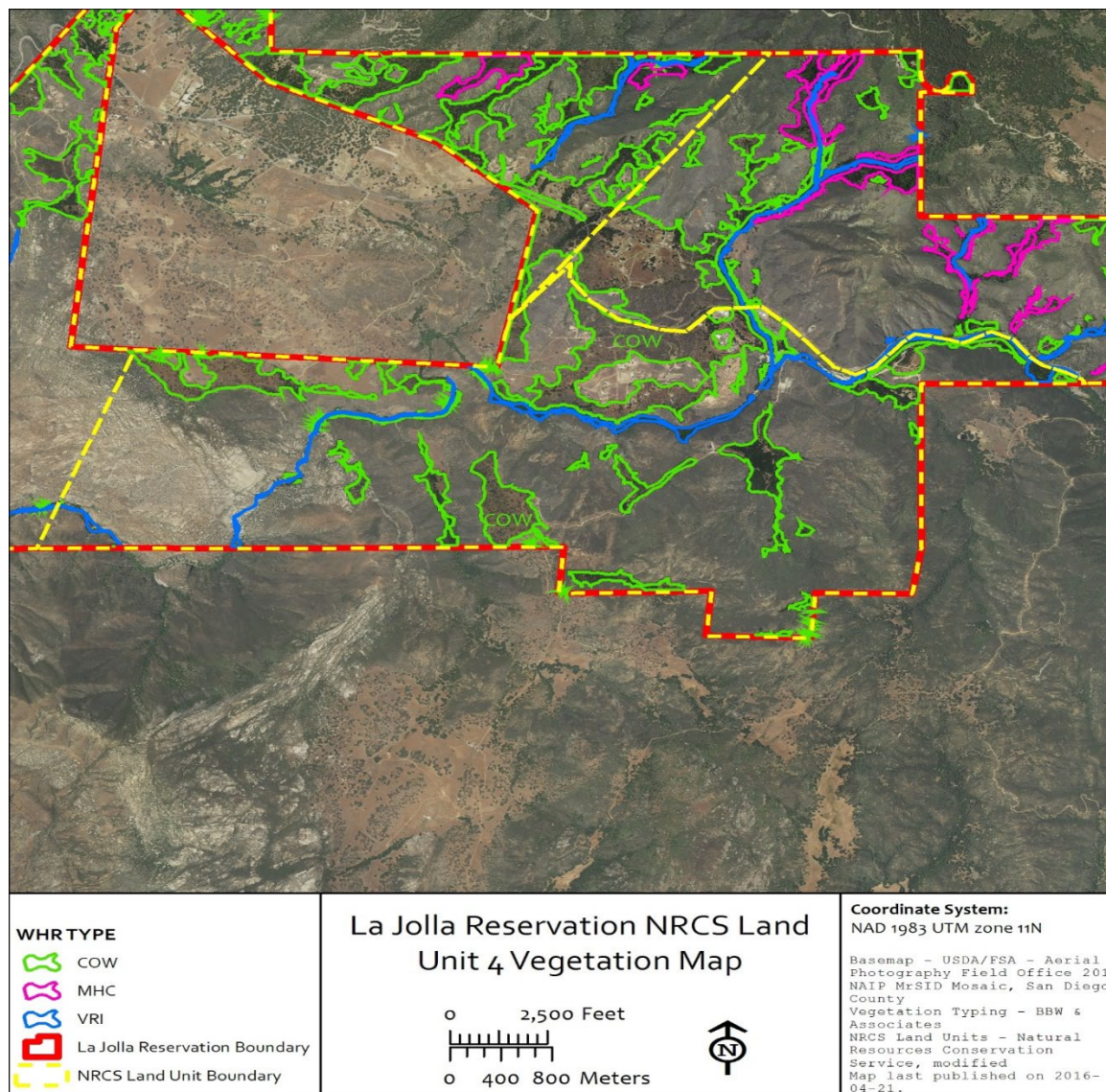


Figure App 8-4. NRCS Land Unit 4 Vegetation Map

Description:**Stand history, age, and desired rotation cycle:**

There are no commercially valuable conifers in this Unit, so no logging has occurred. It is unknown where or when hardwood harvests have occurred. Based on the Fire History map, portions of this unit burned in 1917, 1927, 1931, 1962, and 2003. Most of it also burned in the 2007 Poomacha Fire. The severity of these fires is unknown, but the Poomacha Fire appears to have burned the chaparral intensively and the forest severely in some areas and less severely in others. It is likely that in the past decade, due to drought and the effects of the Poomacha Fire, hardwood mortality has accelerated and has caused a significant decline in overall stand growth.

Tree species present, forest type and/or ecological site description (ESD):

There are two WHR forest types in Unit #4, Coastal Oak Woodland (COW) and Valley Foothill Riparian (VRI). Coast live oak is the dominant tree species in the COW type in this unit, although there are stands dominated by Engelmann oaks. In the VRI type, white alder is the dominant tree species adjacent to San Luis Rey River, with some black (?) willow and velvet ash. California sycamore and coast live oak tend to be found further from the water. Refer to Current Property Conditions, Forest Infrastructure, Forest Types (page 14) for a more detailed description of each of the WHR types found in Unit #4.

Site index, soil type, elevation, and slope:

Site index was assigned based on regional data; for COW at 40 feet at 50 years, for MHC at 50 feet at 50 years, and for VRI at 60 feet at 50 years (DeLasaux and Pillsbury, 1987). The importance of site index to this assessment is that assigned site index was used to estimate growth and mortality based on regional data. Based on the NRCS soil survey, the forested portion of Unit #4 is primarily underlain by HnE, HnG, and BrE soils. Holland stony fine sandy loam, 5-30% slopes (**HnE** and **HnG** - residuum weathered from mica schist) has a low available water content to the depth of a restrictive layer. Boomer stony loam, 9-30% slopes (**BrE** - residuum weathered from gabbro) has a moderate available water content to the depth of a restrictive layer. Elevations in this unit range from about 1000 to 2600 feet.

DBH/size class, basal area, trees/acre, stocking, growth/yield potential:

The results of FVS runs of inventory data for the two WHR types found in Unit #4 are summarized in Table 2 Reservation-Wide Conifer and Hardwood Stocking (page 21) and Table 3 Reservation-Wide Conifer and Hardwood Growth (page 22). The complete tables are shown in Appendix 6. These FVS summaries show, by species: DBH/size class, basal area/acre, trees/acre, board feet and cubic feet/acre, stocking, growth/yield potential, and other stand parameters. Although the FVS runs were for all plots inventoried during the 2016 field work and are not specific to any Unit, most of the plots in both the COW and the VRI types were established in Unit #4.

Regeneration and stand improvement need:

Because the woodlands have limited commercial value and are not being actively managed, only a limited amount of forest development is proposed, most of which is associated with improving the health, vigor, and fire resiliency of tree stands, particularly in the vicinity of residential areas. It would be beneficial from a stand health, vigor, growth, fire resiliency, and riparian flow enhancement standpoint to thin low-vigor, unhealthy trees in all crown classes (see Management Plan Implementation, Fire Protection, page 48).

Riparian, meadows, aquatic habitat, stream, and other watercourses:

San Luis Rey River, the lower portion of Cedar Creek, and several unnamed seasonal creeks, flow through this unit. The quality of water in these creeks is unknown and the quantity is limited at certain times of the year.

3660 **Understory, downed woody debris, snags, wildlife habitat:**

3661 Unit #4 is dominated by the COW type, which tends to be densest near seasonal watercourses.
3662 Understory trees and shrubs are minimal in this unit due to the dense tree canopy. Downed woody
3663 debris in general consists of scattered broken limbs, twigs, and leaves. The COW type provides habitat
3664 for a variety of wildlife species. Barrett (1980) reports that at least 60 species of mammals may use
3665 oaks in some way. Verner (1980) reports 110 species of birds observed during the season in California
3666 habitats where oaks form a significant part of the canopy or subcanopy. Quail, turkeys, squirrels, and
3667 deer may be so dependent on acorns in fall and early winter that a poor acorn year can result in
3668 significant declines in their populations (Duncan and Shields 1966). The riparian woodlands along San
3669 Luis Rey River and the creek in Lusardi Canyon may provide important habitat for the endangered least
3670 Bell's vireo and other sensitive bird species, including the southwestern willow flycatcher, western,
3671 yellow-billed cuckoo, yellow warbler, and yellow-breasted chat.

3672 **Unit Management Resource Concerns and Recommendations:**

3673 **Erosion concerns:**

3674 Based on the NRCS soil survey, HnE, HnG, and BrE soils have a moderate hazard of off-road or off-
3675 trail erosion, a severe hazard of erosion on roads and trails, and are poorly suited for natural surface
3676 roads

3677 Where Vallecitos Road cross watercourses or at ditch relief culverts there is a high likelihood that,
3678 without periodic maintenance, eventually one or more culverts will become plugged or otherwise fail,
3679 potentially resulting in diversion of water down the road, causing extensive damage to the road prism
3680 and potentially hill slopes and watercourses. Where gullying, rilling, or soft surfaces are problems,
3681 drainage structures (rolling dips, waterbars, culverts, ditches) should be installed, to remove water
3682 quickly from the road surface, and gravel should be installed where needed to provide for a stable
3683 travel surface. Use of native surface roads should be limited to dry periods or to periods when road
3684 surfaces will not be adversely affected by vehicle traffic.

3685

3686

NRCS MANAGEMENT ACTIVITY DECISIONS, SCHEDULE, AND TRACKING

Unit	Acres/ feet	NRCS Practice Code	Treatment Activity Description	Dates		Cost Share Used? Type?	Net Cash Flow	
				Planned	Completed		Cost	Income
MU 1	19.0	383	Fuel Break (Ac.)	2025	Planned	N/A	\$17,599	\$17,599
MU 2	19.0	383	Fuel Break (Ac.)	2025	Planned	N/A	\$16,673	\$16,673
MU 3	13.0	383	Fuel Break (Ac.)	2025	Planned	N/A	\$12,041	\$12,041
MU 3	8.0	490	Tree/Shrub Site Preparation (Ac.)	2025	Planned	N/A	\$6,270	\$6,270
MU 4	14.0	383	Fuel Break (Ac.)	2025	Planned	N/A	\$12,968	\$12,968
MU 1	3.5	490	Tree/Shrub Site Preparation (Ac.)	2024	Planned	N/A	\$2,743	\$2,743
MU 3	8.5	383	Fuel Break (Ac.)	2024	Planned	N/A	\$7,873	\$7,873
MU 4	8.5	383	Fuel Break (Ac.)	2024	Planned	N/A	\$7,873	\$7,873
MU 2	12.0	383	Fuel Break (Ac.)	2025	Planned	N/A	\$11,115	\$11,115
MU 2	11.0	383	Fuel Break (Ac.)	2025	Planned	N/A	\$10,189	\$10,189
MU 2	11.0	384	Woody Residue Treatment (Ac.)	2022	Planned	N/A	\$2,475	\$2,475
MU 2	12.0	384	Woody Residue Treatment (Ac.)	2025	Planned	N/A	\$2,700	\$2,700
MU 3	8.5	384	Woody Residue Treatment (Ac.)	2024	Planned	N/A	\$1,913	\$1,913
MU 4	8.5	384	Woody Residue Treatment (Ac.)	2024	Planned	N/A	\$1,913	\$1,913
MU 1	3.5	384	Woody Residue Treatment (Ac.)	2024	Planned	N/A	\$788	\$788
MU 3	12.6	383	Fuel Break	2025	Planned	N/A	\$20,535	\$20,535
MU 1	10.5	383	Fuel Break	2025	Planned	N/A	\$17,112	\$17,112
MU 2	15.0	383	Fuel Break	2024	Planned	N/A	\$24,446	\$24,446
MU 2	N/A	106	Forest Management Plan	2026	Planned	N/A	\$2,797	\$0
MU 1	N/A	106	Forest Management Plan	2026	Planned	N/A	\$5,854	\$0
MU 4	N/A	106	Forest Management Plan	2026	Planned	N/A	\$5,854	\$0
MU 3	N/A	106	Forest Management Plan	2026	Planned	N/A	\$5,854	\$0
MU 4	0.2	391	Riparian Forest Buffer	2026	Planned	N/A	\$927	\$0
MU 4	0.2	391	Riparian Forest Buffer	2026	Planned	N/A	\$927	\$0
MU 2	1.0	587	Structure for Water Control	2027	Planned	N/A	\$3,351	\$2,638
MU 3	1.1	384	Woody Residue Treatment	2027	Planned	N/A	\$255	\$0

Unit	Acres/ feet	NRCS Practice Code	Treatment Activity Description	Dates		Cost Share Used? Type?	Net Cash Flow	
				Planned	Completed		Cost	Income
MU 3	1.1	643	Restoration and Management of Rare and Declining Habitats	2027	Planned	N/A	\$423	\$0
MU 2	1.2	384	Woody Residue Treatment	2027	Planned	N/A	\$279	\$0
MU 2	1.2	643	Restoration and Management of Rare and Declining Habitats	2027	Planned	N/A	\$461	\$0
MU 1	1.3	384	Woody Residue Treatment	2027	Planned	N/A	\$302	\$0
MU 1	1.3	643	Restoration and Management of Rare and Declining Habitats	2027	Planned	N/A	\$499	\$0
MU 3	1.8	384	Woody Residue Treatment	2027	Planned	N/A	\$418	\$0
MU 3	1.8	643	Restoration and Management of Rare and Declining Habitats	2027	Planned	N/A	\$691	\$0
MU 2	2.7	384	Woody Residue Treatment	2027	Planned	N/A	\$626	\$0
MU 2	2.7	643	Restoration and Management of Rare and Declining Habitats	2027	Planned	N/A	\$1,037	\$0
MU 2	3.1	384	Woody Residue Treatment	2027	Planned	N/A	\$719	\$0
MU 2	3.1	643	Restoration and Management of Rare and Declining Habitats	2027	Planned	N/A	\$1,190	\$0
MU 3	3.8	666	Forest Stand Improvement	2025	Planned	N/A	\$4,330	\$4,330
MU 3	3.8	660	Tree Pruning	2025	Planned	N/A	\$897	\$897
MU 3	3.8	384	Woody Residue Treatment	2025	Planned	N/A	\$1,234	\$1,234
MU 3	3.8	315	Herbaceous Weed Control	2027	Planned	N/A	\$1,074	\$1,074
MU 1	6.0	315	Herbaceous Weed Control	2025	Planned	N/A	\$1,696	\$1,696
MU 1	6.1	666	Forest Stand Improvement	2025	Planned	N/A	\$6,951	\$6,951
MU 1	6.1	660	Tree Pruning	2025	Planned	N/A	\$1,440	\$1,440

Unit	Acres/ feet	NRCS Practice Code	Treatment Activity Description	Dates		Cost Share Used? Type?	Net Cash Flow	
				Planned	Completed		Cost	Income
MU 1	6.1	384	Woody Residue Treatment	2025	Planned	N/A	\$1,981	\$1,981
MU 1	6.1	315	Herbaceous Weed Control	2026	Planned	N/A	\$1,725	\$0
MU 2	8.5	315	Herbaceous Weed Control	2025	Planned	N/A	\$2,403	\$2,403
MU 4	8.5	315	Herbaceous Weed Control	2026	Planned	N/A	\$2,403	\$2,403
MU 1	10.5	315	Herbaceous Weed Control	2026	Planned	N/A	\$2,968	\$2,968
MU 3	11.0	315	Herbaceous Weed Control	2026	Planned	N/A	\$3,109	\$3,109
MU 2	12.0	315	Herbaceous Weed Control	2025	Planned	N/A	\$3,392	\$3,392
MU 4	12.2	384	Woody Residue Treatment	2027	Planned	N/A	\$3,962	\$3,962
MU 4	12.2	315	Herbaceous Weed Control	2027	Planned	N/A	\$3,449	\$0
MU 4	12.2	660	Tree Pruning	2027	Planned	N/A	\$2,880	\$2,880
MU 4	12.2	666	Forest Stand Improvement	2027	Planned	N/A	\$13,902	\$13,902
MU 3	12.6	315	Herbaceous Weed Control	2026	Planned	N/A	\$3,562	\$3,562
MU 3	13.0	315	Herbaceous Weed Control	2025	Planned	N/A	\$3,675	\$3,675
MU 2	15.0	315	Herbaceous Weed Control	2026	Planned	N/A	\$4,240	\$4,240
MU 4	17.6	384	Woody Residue Treatment	2026	Planned	N/A	\$5,716	\$5,716
MU 4	17.6	660	Tree Pruning	2026	Planned	N/A	\$4,154	\$4,154
MU 4	17.6	666	Forest Stand Improvement	2026	Planned	N/A	\$20,055	\$20,055
MU 4	17.6	315	Herbaceous Weed Control	2027	Planned	N/A	\$4,975	\$4,975
MU 2	19.0	315	Herbaceous Weed Control	2025	Planned	N/A	\$5,371	\$5,371
MU 1	19.0	315	Herbaceous Weed Control	2026	Planned	N/A	\$5,371	\$5,371
MU 2	70.0	560	Access Road	2027	Planned	N/A	\$80	\$79

Unit	Acres/ feet	NRCS Practice Code	Treatment Activity Description	Dates		Cost Share Used? Type?	Net Cash Flow	
				Planned	Completed		Cost	Income
MU 2	70.0	560	Access Road	2027	Planned	N/A	\$80	\$79
MU 2	70.0	560	Access Road	2027	Planned	N/A	\$80	\$79
MU 2	100.0	560	Access Road	2026	Planned	N/A	\$568	\$568
MU 2	140.0	560	Access Road	2027	Planned	N/A	\$1,136	\$1,136
MU 2	140.0	560	Access Road	2027	Planned	N/A	\$159	\$158
MU 2	180.0	560	Access Road	2027	Planned	N/A	\$603	\$603
MU 2	200.0	560	Access Road	2026	Planned	N/A	\$568	\$568
MU 2	200.0	560	Access Road	2027	Planned	N/A	\$1,136	\$1,136
MU 1	1.3	314	Brush Management	2027	Planned	N/A	\$1,114	\$1,114
MU 2	3.1	314	Brush Management	2027	Planned	N/A	\$2,656	\$2,656
MU 2	2.7	314	Brush Management	2027	Planned	N/A	\$2,313	\$2,313
MU 2	1.2	314	Brush Management	2027	Planned	N/A	\$1,028	\$1,028
MU 3	1.8	314	Brush Management	2027	Planned	N/A	\$1,542	\$1,542
MU 3	1.1	314	Brush Management	2027	Planned	N/A	\$942	\$942
MU 1	1.3	314	Brush Management	2028	Planned	N/A	\$1,114	\$0
MU 2	2.7	314	Brush Management	2028	Planned	N/A	\$2,313	\$0
MU 2	1.2	314	Brush Management	2028	Planned	N/A	\$1,028	\$0
MU 2	3.1	314	Brush Management	2028	Planned	N/A	\$2,656	\$0
MU 3	1.8	314	Brush Management	2028	Planned	N/A	\$1,542	\$0
MU 3	1.1	314	Brush Management	2028	Planned	N/A	\$943	\$0
MU 4	13.7	315	Herbaceous Weed Control	2026	Planned	N/A	\$4,070	\$0
MU 4	14.6	315	Herbaceous Weed Control	2026	Planned	N/A	\$4,337	\$0
MU 4	12.5	315	Herbaceous Weed Control	2027	Planned	N/A	\$3,713	\$0
MU 4	13.5	315	Herbaceous Weed Control	2027	Planned	N/A	2020	\$0
MU 4	12.3	315	Herbaceous Weed Control	2028	Planned	N/A	\$3,654	\$0
MU 4	8.0	315	Herbaceous Weed Control	2028	Planned	N/A	\$2,377	\$0
MU 4	14.6	383	Fuel Break	2025	Planned	N/A	\$23,742	\$23,742
MU 4	13.7	383	Fuel Break	2025	Planned	N/A	\$22,278	\$22,278
MU 4	12.5	383	Fuel Break	2026	Planned	N/A	\$20,327	\$20,327

Unit	Acres/ feet	NRCS Practice Code	Treatment Activity Description	Dates		Cost Share Used? Type?	Net Cash Flow	
				Planned	Completed		Cost	Income
MU 4	13.5	383	Fuel Break	2026	Planned	N/A	\$21,953	\$21,953
MU 4	8.0	383	Fuel Break	2027	Planned	N/A	\$13,009	\$13,009
MU 4	8.0	383	Fuel Break	2027	Planned	N/A	\$13,009	\$13,009
MU 4	24.6	666	Forest Stand Improvement	2028	Planned	N/A	\$22,769	\$0
MU 4	24.6	314	Brush Management	2029	Planned	N/A	\$3,495	\$0
MU 4	6.9	314	Brush Management	2029	Planned	N/A	\$981	\$0
MU 4	6.3	314	Brush Management	2029	Planned	N/A	\$895	\$0
MU 4	4.2	660	Tree/Shrub Pruning	2028	Planned	N/A	\$1,149	\$0
MU 4	4.2	384	Woody Residue Treatment	2028	Planned	N/A	\$1,368	\$0
MU 4	6.9	383	Fuel Break	2028	Planned	N/A	\$15,033	\$0
MU 4	6.3	383	Fuel Break	2028	Planned	N/A	\$13,726	\$0
MU 4	8.5	383	Fuel Break	2027	Planned	N/A	\$16,123	\$0
MU 4	8.5	314	Brush Management	2028	Planned	N/A	\$1,208	\$0
MU 4	16.7	383	Fuel Break	2020	Planned	N/A	N/A	\$0
MU 4	7	383	Fuel Break	2020	Planned	N/A	N/A	\$0
MU 3	8.9	383	Fuel Break	2020	Planned	N/A	N/A	\$0
MU2	2.5	383	Fuel Break	2029	Planned	N/A	N/A	\$0
MU2	3	383	Fuel Break	2029	Planned	N/A	N/A	\$0
MU1	3	383	Fuel Break	2020	Planned	N/A	N/A	\$0
MU1	7	383	Fuel Break	2020	Planned	N/A	N/A	\$0
MU 4		383	Fuel Break	2021	Planned	N/A	N/A	
MU 4		383	Fuel Break	2021	Planned	N/A	N/A	
MU 4		383	Fuel Break	2022	Planned	N/A	N/A	

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3688 Scott, Joe, and Robert Burgan, 2005. Standard Fire Behavior Fuel Models: A Comprehensive Set for
3689 Use with Rothermel's Surface Fire Spread Model. USDA Forest Service Rocky Mountain
3690 Research Station General Technical Report, RMRS-GTR-153, June 2005.

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3692 Indian Forest Management Handbook 53 IAM 2-H: Forest Management Planning. Department of the
3693 Interior Bureau of Indian Affairs Division of Forestry AND WILDLAND FIRE MANAGEMENT, 19
3694 March, 2009, [https://www.bia.gov/sites/bia.gov/files/assets/public/raca/handbook/pdf/53- IAM-](https://www.bia.gov/sites/bia.gov/files/assets/public/raca/handbook/pdf/53- IAM-2H-Forest-Management-Planning-HB_OIMT.pdf)
3695 [2H-Forest-Management-Planning-HB_OIMT.pdf](https://www.bia.gov/sites/bia.gov/files/assets/public/raca/handbook/pdf/53- IAM-2H-Forest-Management-Planning-HB_OIMT.pdf), Accessed 10 July 2020.

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APPENDIX 9 – GSOB TREE SURVEY FORM & INSTRUCTIONS



BARK STAIN RATING

1. One to five areas of staining present on lower stem (<8 feet). 2. Six to 10 stained areas. 3. Greater than 10 areas of staining on the lower stem. 4. Bark cracking evident on main stem.



EXIT HOLE RATING

1. Can find at least one D-shaped exit hole on the main stem. 2. Can find a few exit holes (10-25) in clumps on the main stem. 3. Exit holes are scattered and abundant on the main stem (>25).

Figure App 9-1. Tree Survey Form & Instructions

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Date:

Recorder:

Site:

N	W	Tag #	Species	DBH (4.5' above soil)	Crown Rating (1 to 5)	Bark Staining (1 to 4)	Emergen ce Hole Rating (0 to 3)	# Exit holes	Woodp ecker foragin g (yes or no)	Woodb orers 0/1	Tree has a Cavity 0/1	Anoth er Stainin g 0/1	Other damage 0/1	Old woodpe cker 0/1	WOBB 5 0/1	Tree Remov ed 0/1	Comme nts

3700

3701 APPENDIX 10 – BIA NATURAL RESOURCE PROGRAMS



United States Department of the Interior
Bureau of Indian Affairs
SOUTHERN CALIFORNIA AGENCY
1451 Research Park Drive, Ste. 100
Riverside, CA 92507



Overview of Programs Administered by the Pacific Region's Division of Natural Resources

The following programs are administered through the Bureau of Indian Affairs, Division of Natural Resources. The due dates listed below ensure that requests and reports are submitted to the National Office in a timely manner. Agencies should submit proposals and accomplishment reports by the dates listed below to allow the appropriate Bureau of Indian Affairs Office the opportunity to provide tribes technical assistance and allow for the tracking of tribal needs.

Pacific Regional Office Recommended Agency Proposal Due Dates

Project proposals will be accepted throughout the year. The due dates shown below reflect the dates that are required to ensure that they are forwarded to the Regional Office by its due dates (forestry technical service providers 53 BIAM Supp.1 § 1.3-PAA). Tribes that have forestry programs under the jurisdiction of the Northern and Southern California Agency offices must submit their proposals to the appropriate office by the due dates set by those offices.

Proposals/Applications

Forest Management Inventory & Planning Proposals
Forest Development Action Plans & Proposals
Winter Operational Plans (ongoing timber harvest)
Endangered Species Compliance Act Proposals
Woodland Management Proposals
Forestry Youth Initiative
National Timber Harvest Initiative Proposals
Watershed Restoration Proposals
Climate Change, Inventory and Planning Proposals
Conservation Law Enforcement Officer
Cadastral Survey Requests (BLM Service Request)
Housing Improvement Program
Invasive (Species) Wildlife
Tribal Youth Initiative
Geospatial Capacity
Noxious Weed Proposals
Agriculture/Rangeland Inventory & Planning Proposals
Maintenance of Tribal Fish Hatcheries
Climate Change
"Co-op" Natural Resources and Agriculture/Range Applications
Integrated Resource Management Plans Proposals
Earth Day/Arbor Day Event Proposals
Wildland Urban Interface Fuels Reduction Proposals
Hazardous Fuels Reduction Proposals
Forest Pest Management Proposals
Water Resources Program Proposals

Due Date

September 1
September 1
September 16
October 18
October 18
October 31
October 31
October 31
November 18
November 18
December 2
December 4*
December 18
December 18
December 18
December 25
December 25
January 1
January 3*
February 1**
February 1
March 30
April 1
April 1
July 18
August 16

**_Time approximate advertised on www.usajobs.gov

Accomplishments/Progress Reports/Producing Plans

The due dates shown below reflect when the accomplishments/progress reports are due to the Regional Office. Tribes that have forestry programs under the jurisdiction of the Northern and Southern California Agency offices must submit their accomplishments/ progress reports and plans to the appropriate office by the due dates set by those offices.

<u>Accomplishments/Progress Reports/Producing Plans</u>	<u>Due Date</u>
<i>Wildland Urban Interface Fuels Reduction</i>	<i>The 11th of each month</i>
<i>Hazardous Fuels Reduction</i>	<i>The 11th of each month</i>
Forest Pest Management Accomplishments	August 1
Updates to Catalog of Forest Acres	September 1
Integrated Resources Management Plans	September 1 (4th Quarter Progress Report)
Forest Development Accomplishments	September 1
Arbor Day/Earth Day Accomplishments	September 1
Wildland Urban Interface Fuels Reduction	September 11 (Final Acres for Fiscal Year)
Hazardous Fuels Reduction	September 11 (Final Acres for Fiscal Year)
Forest Management Expenditure Plans	Sept. 17 for Tribes with FY ending Sept. 30
Status of Forest Management	October 1
Forest Management Inventory & Planning	October 1
Noxious Weed Reports	October 1
Agriculture/Rangeland Inventory & Planning	October 1
Annual Report of Timber Cut	October 18
Woodland Management Accomplishments	October 18
Winter Operations Status Reports	Current with winter operations
Indian Forestry Status Report	November 1
Forestry Youth Initiative	November 1
Timber Harvest Initiative Accomplishments	November 1
Endangered Species Compliance Act Accomplishments	November 16
Maintenance of Tribal Fish Hatcheries	November 16
Conservation Law Enforcement Officer	November 18**
Climate Change Proposals	November 18**
Integrated Resources Management Plans	December 1 (1st Quarter Progress Report)
Watershed Restoration Accomplishments	December 1
Forest Management Expenditure Plans	December 18 for Tribes with FY ending Dec. 31
Annual Check Scale Reports	January 1
Forest Management Deductions Actual Expenditure Plans	Jan. 14 for Tribes with FY ending Sept. 30
Invasive (Species) Wildlife	January 19
Tribal Youth Initiative	January 19
Geospatial Capacity	January 19
Integrated Resources Management Plans	March 1 (2nd Quarter Progress Report)
Housing Improvement Program	March 17
Forest Management Deductions Actual Expenditure Plans	April 15 for Tribes with FY ending Dec. 31
Wildland Fire Annual Operating/Mob Plans	May 1
Report of Timber Cut *	the 11th of month following harvest*
Integrated Resources Management Plans	June 1 (3rd Quarter Progress Report)

If you have any questions, please call Gerald Jones, Regional Forester, at (916) 978-6076.

* = Starting with the first month in which the timber is scaled

**=New Date

APPENDIX 11 – FREE USE CUTTING AND TIMBER CUTTING PERMIT

TIMBER HARVEST PERMIT

Permit Name & Number:

Indian Reservation:

Permit Type: ☐ Indian Free Use ☐ Indian Paid ☐ Non-Indian Paid

Authority: This permit is authorized by the National Indian Forest Resources Management Act of November 28, 1990 (25 U.S.C. 3101 et seq.), and in accordance with the regulations of 25 CFR § 163.

Permittee Name and Address:

Permission is hereby granted to the Permittee to cut and remove designated timber, on or before from the following tract(s) and as shown on the attached Exhibit A map.

Permit Area Description:

Click or tap here to enter text.

Tribal/Allotted/Other	Title Tract Number	Township	Range	Section	Sale Area Acres	Harvest Block Acres
Total						

Designated Timber

Click or tap here to enter text.

Estimated volume and value of timber consists of species, product, volume, and rates as follows:

Species	Product	Unit of Measure	Estimated Volume	Rate per Unit	Estimated Value
Totals					

The volumes above are estimates only and are not guaranteed.

3724 **Permittee agrees** to comply with the conditions and provisions of this permit by signing below.

Permittee Signature & Date

Seller Signature & Date

Seller Name & Title

Approving Officer Signature & Date

Approving Officer Name & Title

3725

This permit is issued under the following Standard Provisions:

1.0 DEFINITIONS

- 1.1 "Approving Officer" means the officer who approves the contract or their authorized representative.
- 1.2 "Superintendent" means the Superintendent or other Bureau official representing the Agency having jurisdiction over the logging unit or, the authorized representative.
- 1.3 "Officer in Charge" means the forest officer of highest rank assigned to the supervision of forestry work at the Agency having jurisdiction over the logging unit, or his or her authorized representative.
- 1.4 "Permittee" means the Permittee, including employees, agents, or subcontractors.
- 1.5 "Permittee Operations" means all activities and use of equipment by the Permittee in the execution of the permit.

2.0 PERMIT OPERATIONS

- 2.1 The Permittee shall possess this Permit at all times when operating on, or hauling products from, the permit area.
- 2.2 Timber not designated for cutting and young growth will be protected from damage. Unnecessary damage by the Permittee shall be assessed by the Approving Officer and paid for by the Permittee at double the permit stumpage rates.
- 2.3 Stumps will be cut low as practical so as to avoid waste. The mean height of any stump shall not exceed one-half its diameter, unless authorized by the Officer in Charge.
- 2.4 The slash resulting from Permittee Operations, including limbs, tops, damaged young growth and other material, will be treated as directed by the Officer in Charge. The slash will be cut into smaller pieces, scattered, or piled compactly away from the residual trees on the permit area, or a combination thereof. Roads and road rights-of-way and landings will be kept clear of slash.

3.0 SCALING AND MOVEMENT OF PRODUCTS

- 3.1 For sales of estimated volumes, logs or other products shall be decked, stacked, or otherwise held at scaling points designated by the Officer in Charge, and will not be moved therefrom until they have been scaled, stamped, numbered, or otherwise released by the Officer in Charge. Products that are moved contrary to the instructions of the Officer in Charge shall be paid for by the Permittee at double the permit stumpage rates.
- 3.2 For estimated volume sales, waste from high stumps, improper bucking, breakage and partially sound logs, and all trees which are left felled, lodged, or badly damaged by the Permittee Operations, will be scaled for their merchantable contents (as if they had not been damaged) and paid for by the Permittee at double the permit stumpage rates.

4.0 FIRE OPERATIONS

- 4.1 The Permittee will take all reasonable and practicable action to prevent fires resulting from permit activity, as required by a Fire Plan or the Superintendent. When no other fire prevention direction has been provided, the requirements will not be less than that required under the laws of the State in which the permit area is located.
- 4.2 The Permittee will immediately report any and all wildfires to the Officer in Charge.
- 4.3 When called upon by the Superintendent, the Permittee will make available any or all qualified personnel and equipment for use in suppressing wildfire on or threatening the sale area.
- 4.4 The Superintendent may require the Permittee to suspend any or all operations during high fire danger, or when fire is within or threatening the permit area.
- 4.5 It is understood and agreed that the Permittee shall be liable for all damages and suppression costs of fires caused by negligence on the part of the Permittee, in an amount to be determined by the Superintendent.

5.0 ENVIRONMENTAL

- 5.1 In the event that human remains or items of historical or archeological significance is discovered, the Permittee will immediately halt operations and inform the Officer in Charge.
- 5.2 Permittee Operations will be conducted in a manner that will minimize damage to the course, channel and sides of all streams, riparian areas, and wetlands whenever encountered. Streams include both flowing and intermittent watercourses.
- 5.3 The Permittee will take immediate action to contain any hazardous materials spills that have occurred as a part result of Permittee's operations. The Permittee must notify the Officer in Charge immediately of such spills. Hazardous materials will be disposed of as directed by the Officer in Charge. Hazardous materials include, but are

not limited to, petroleum products such as fuel, oil, and hydraulic fluids, and contaminated soils, rock, and vegetative material. Permittee is responsible for environmental liabilities caused by Permittee Operations.

5.4 The Officer in Charge may suspend Permittee Operations during periods of wet weather when soil damages and road rutting could occur. The Officer in Charge may direct the Permittee to take reasonable soil erosion prevention measures to retain road surfaces and prevent the gulying of roads and skid trails, or to repair damages caused by Permittee Operations.

5.5 All equipment, rubbish, garbage, litter, and other refuse resulting from the Permittee Operations shall be removed and disposed of properly.

5.5 Wood from harvested area shall not leave the Reservation if infested by insects, fungal, or bacterial, pathogens.

6.0 OTHER PROVISIONS

6.1 A performance bond may be required by the Approving Officer.

6.2 The Permittee will comply with all other laws and regulations governing the Reservation within which the permit tracts are located.

**Instructions for Completion of
Timber Cutting Permit**

- 3789
3790
- 3791 1. General Information. Completed as indicated to aid in reporting and to help monitor timber harvesting in the field.
- 3792 a. Check appropriate box to indicate type of permit: Indian Free Use, Indian Paid, or Non-Indian Paid.
- 3793 b. Check appropriate box to indicate land ownership type: Allotted or Tribal.
- 3794 c. Enter the permit number (10-digit alpha and/or numeric). This identifying number should be included on
3795 each page attached to the permit.
- 3796 d. Enter the permit name.
- 3797 e. Enter the Reservation name or "Public Domain".
- 3798 f. Enter the permittee's name, address, and date by which designated timber must be cut and removed.
- 3799 g. Enter the permit tract or tract(s) and legal description. Reference should be made to a permit map if
3800 applicable (i.e., See attached "Exhibit A" permit map).
- 3801 h. Enter the species, products, units, and rates for designated timber. Add marking guidelines, if applicable.
- 3802 i. Indicate free use or requirements for payment for timber (i.e., Single payment, installment payments,
3803 advance payments, advance deposits, any waiver of requirements made for permits issued to Indian Forest
3804 Enterprises and whether or not payment is to be made directly to a Tribe or to the BIA Agency OST
3805 lockbox).
- 3806 2. Special Provisions. Each item of the permit may reference additional language to be attached as part of the permit.
3807 These special provisions shall be carefully prepared to prevent contradiction with provisions preprinted on the form.
3808 Inapplicable preprinted provisions on page 2 of the permit should be described in the Special Provisions section as
3809 not applicable. This is especially important for the standard fire suppression provisions since they could establish
3810 federal liability for injuries and death resulting from the suppression efforts of unqualified permittees or their
3811 employees. Crossing out text is inappropriate.
- 3812 3. Signatures
- 3813 a. Signed. The "Signed" line designated for "Permittee" shall be signed and dated by the person obtaining the
3814 permit. If the Permittee is a Tribe, the authorized Tribal Representative signs. This individual or entity is
3815 responsible for all activities associated with the harvest under the permit.
- 3816 b. Authorized Signature
- 3817 (1) Allotment Timber
- 3818 • The signature line designated for "Allottee" shall be signed and dated by the Superintendent on
3819 behalf of the undivided interest (through signed powers-of-attorney form) or by the individual owner
3820 if it is a sole owner allotment.
- 3821 • In the absence of powers-of-attorney for multiple owner allotments, the permit with attached
3822 signature pages may be signed and witnessed for each undivided interest. Each allottee should
3823 receive a copy of the permit prior to their signing. Signature of allottees should be acquired by
3824 authorized BIA/Tribal personnel and should not be acquired by the permittee.
- 3825 • Witnesses. The signature of each allottee must be witnessed by two individuals. Witnesses of each
3826 allottee's signing should sign as indicated and should also provide their address. If a witness
3827 signature is illegible, the name should be typed or printed adjacent to the signature.
- 3828 (2) Tribal Timber
- 3829 The authorizing Tribal representative shall be that individual/title specified in the timber use policy
3830 or Tribal resolution/minutes approving the harvest. In the absence of Tribal designated authority,
3831 the authorizing signature shall be that of the Tribal chair/president or a designated representative.
- 3832 c. Approved
- 3833 The signature line designated for the approving officer shall be signed by the line officer delegated the
3834 authority to approve the permit. The signatory's title will be typed or printed below their signature. The
3835 approval date also needs to be indicated adjacent to the signature.

3836

APPENDIX 12 – ACRONYMS

3837	° F - degrees Fahrenheit	3875	FMPA - Fire Management Preparedness
3838	AAC - Annual Allowable Cut	3876	Analysis
3839	Agency - BIA Southern California Agency	3877	FMZ - Fire Management Zone
3840	APHIS - Animal and Plant Health Inspection	3878	FONSI - Finding of No Significant Impact
3841	Service	3879	FOR - Forest Officers Report
3842	BAER - Burned Area Emergency Response	3880	FPR - Forest Practices Regulation
3843	BIA - Bureau of Indian Affairs	3881	FPS - Forest Projection System
3844	CA FPR - California Forest Practice Rules	3882	FRAP - CAL FIRE's Fire and Resource
3845	CAA - Clean Air Act	3883	Assessment Program
3846	CAL FIRE – California Department of Forestry	3884	GFW - General Forest/Woodland
3847	and Fire Protection	3885	GIS - Geographic Information System
3848	CDF - California Department of Forestry	3886	GRPA - BIA Government Results Performance
3849	CEA - Conservation Easement Area	3887	Act
3850	CFI - Continuous Forest Inventory	3888	GSOB - Goldspotted Oak Borer
3851	CFR - Code of Federal Regulations	3889	IAM - Indian Affairs Manual
3852	COW - Coast Oak Woodland	3890	IC - Incident Commander
3853	CT - Commercial Thin	3891	ID - Interdisciplinary
3854	CWHR - California Wildlife Habitat Relationship	3892	IFLAA - Indian Forest Land Assistance Account
3855	DBH - Diameter at Breast Height	3893	IRMP - Integrated Resource Management Plan
3856	DIB - Diameter Inside Bark	3894	ISS - Invasive Species Specialist
3857	DOI - United States Department of the Interior	3895	LJIR - La Jolla Indian Reservation
3858	DPA - Direct Protection Area	3896	LTSY - Long-term Sustained Yield
3859	EA - Environmental Assessment	3897	MBF - Thousand Board Feet
3860	EHR - Erosion Hazard Rating	3898	MHC - Montane Hardwood-Conifer
3861	ELZ - Equipment Limitation Zone	3899	MIST – Minimum Impact Suppression
3862	ENG - Engelmann Oak	3900	Techniques
3863	EP - Environmental Protection	3901	MMBF - Million Board Feet
3864	EPA - Environmental Protection Agency	3902	MOU - Memorandum of Understanding
3865	ES - Emergency Stabilization	3903	NAAQS - National Ambient Air Quality
3866	ESA - Endangered Species Act	3904	Standards
3867	FARR - Federal Air Rules for Reservations	3905	NBA - North Boundary Area
3868	FD - La Jolla Fire Department	3906	NEPA - National Environmental Policy Act
3869	FFMS - Fire and Fuels Management Specialist	3907	NF - National Forest
3870	FIA - Forest Inventory and Analysis	3908	NFMAS - National Fire Management Analysis
3871	FLAD - Forest Landscape Analysis and Design	3909	System
3872	FMD - Forest Management Deduction	3910	NHPA - National Historic Preservation Act
3873	FMO - Fire Management Officer	3911	NOI - Notice of Intent
3874	FMP - Fire Management Plan	3912	NPDES - National Pollution Discharge
		3913	Elimination System

3914	NRCS - Natural Resources Conservation
3915	Service
3916	NRD – Natural Resources Department
3917	NRO - La Jolla Indian Forest Manager
3918	OHWM - Ordinary High Watermark
3919	OIC - Officer in Charge
3920	PCT - Precommercial Thin
3921	PLSS - Public Land Survey System
3922	PMO - Pest Management Officer
3923	PRO - Pacific Regional Office
3924	PSHB - Polyphagous Shot Hole Borer
3925	RF - Residential Forest
3926	RMZ - Riparian Management Zone
3927	RPF - Registered Professional Forester
3928	SCA - Southern California Agency (BIA)
3929	SDCRCD - San Diego County Resource
3930	Conservation District
3931	SDICC - San Diego Interagency
3932	Communications Center
3933	SLR - San Luis Rey River
3934	T&E - threatened and endangered
3935	THPO - Tribal Historic Preservation Officer
3936	TPA - Trees per Acre
3937	Tribe - La Jolla Band of Luiseño Indians
3938	TSI - Timber Stand Improvement
3939	USDA - United States Department of
3940	Agriculture
3941	USFS - United States Forest Service (USDA)
3942	USFWS - United States Fish and Wildlife
3943	Service
3944	USNPS - United States National Park Service
3945	FVS - USDA Forest Service Forest Vegetation
3946	Simulator
3947	VRI - Valley Foothill Riparian
3948	VRI - Riparian Protection Zone (synonymous
3949	with vegetation type Valley Riparian, also
3950	denoted as VRI)
3951	WFPA - Western Forest Protection Association
3952	WMZ - Wetland Management Zone
3953	WUI - Wildland Urban Interface