

Restoration and chaparral landscapes: Forest Service strategic goals and funding opportunities

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Ecological restoration is:

“The process of assisting the recovery of an ecosystem that has been degraded, damaged or destroyed. Restoration focuses on establishing the composition, structure, pattern, and ecological processes necessary to make terrestrial and aquatic ecosystems sustainable, resilient, and healthy under current and future conditions”

(Day et al. 2006; <http://www.fs.fed.us/restoration/QandAs.shtml>).



Restoration is a major focus area for the Forest Service



Region 5 Ecological Restoration Leadership Intent

The mission of the Forest Service is to sustain the health, diversity and productivity of the Nation's forests and grasslands to meet the needs of present and future generations. It is our intent to establish a regional vision and corresponding goals for Ecological Restoration consistent with this mission and the laws, regulations and policies that guide National Forest management.

Our goal for the Pacific Southwest Region¹ is to retain and restore ecological resilience of the National Forest lands to achieve sustainable ecosystems that provide a broad range of services to humans and other organisms. Ecologically healthy and resilient landscapes, rich in biodiversity, will have greater capacity to adapt and thrive in the face of natural disturbances and large scale threats to sustainability, especially under changing and uncertain future environmental conditions such as those driven by climate change and increasing human use. Our goal is based on a commitment to land and resource management that is infused by the principles of Ecological Restoration and driven by policies and practices that are dedicated to make land and water ecosystems more sustainable, more resilient, and healthier under current and future conditions.

Ecosystem services are the goods and services that flow from wildlands and forests that are valued and used by people, and that directly or indirectly support human well-being. Wildlands and forests are valued for basic goods, such as wood, fiber, and water, but these ecosystems also deliver important services that are perceived to be free or limitless such as air and water purification, flood and climate regulation, biodiversity, scenic landscapes, wildlife habitat, and carbon sequestration and storage. The National Forests are important providers of ecosystem services to humans and to other inhabitants of our wildlands as well. Our commitment to restoration-based manage-

¹ The Pacific Southwest Region (also known as Region 5) includes California, Hawaii and the Pacific Islands. It also includes small portions of the state of Nevada, managed by the Inyo National Forest, and the state of Oregon, managed by the Siskiyou National Forest.



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USDA
United States Department of Agriculture
Forest Service
February 2012

Increasing the Pace of Restoration and Job Creation on Our National Forests

Ecosystem Restoration:

A Framework for Restoring and Maintaining the National Forests and Grasslands

USDA Forest Service
January 6, 2006

http://www.fs.fed.us/restoration/documents/RestFramework_final_010606.pdf

Pacific SW Region: Ecological Restoration Regional Leadership Intent

- the Forest Service’s fundamental goal is to “retain and restore ecological resilience of the National Forest lands to achieve sustainable ecosystems that provide a broad range of services to humans and other organisms.”
- “from this point forward, ecological restoration will be the central driver of wildland and forest stewardship in the Pacific Southwest Region.”



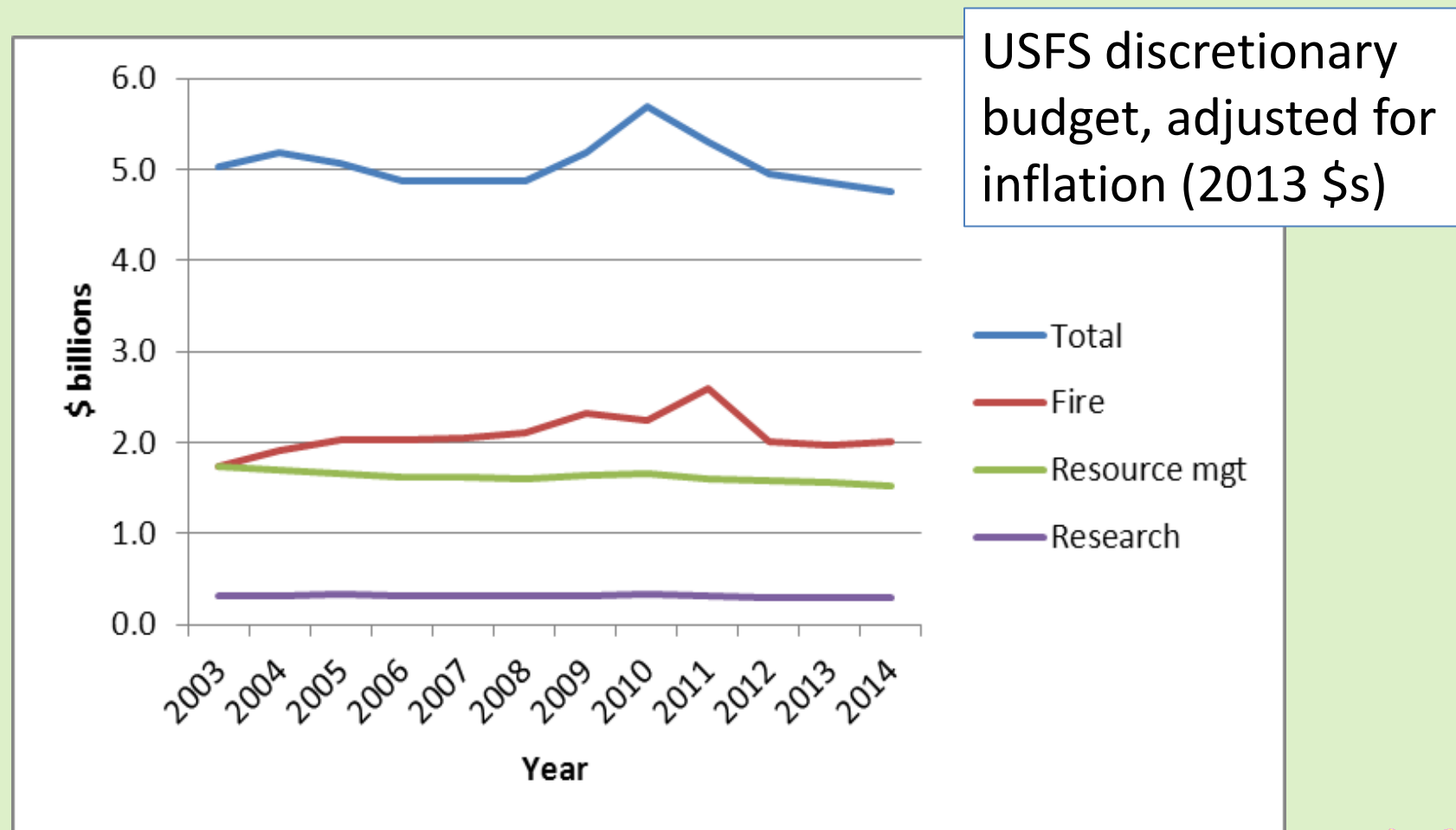
However, there are serious limitations to our capacity to implement restoration at a meaningful pace and scale

The Forest Service Ecosystem Restoration Framework:

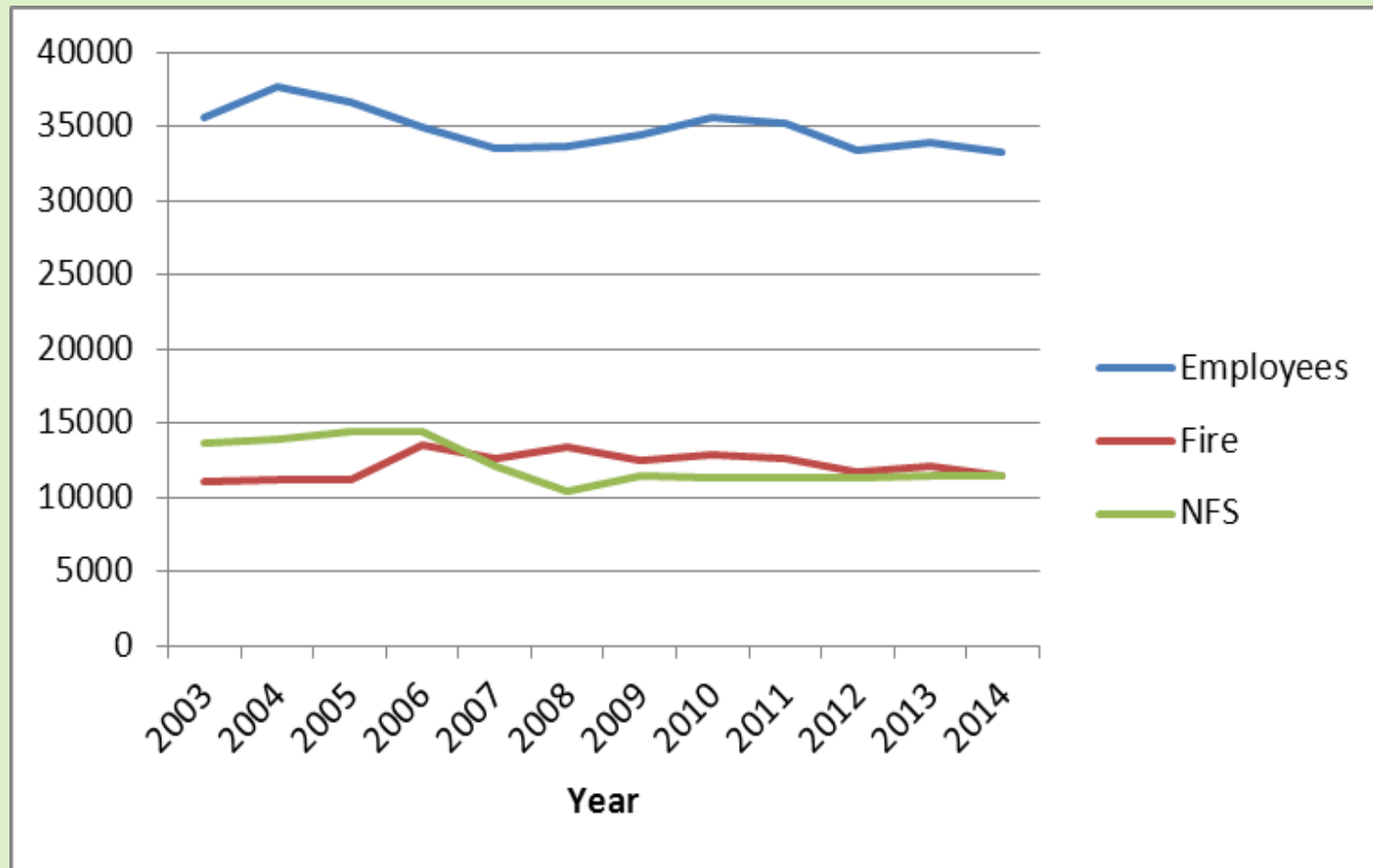
“The nation’s forests and grasslands face serious threat to their long-term health, productivity, and diversity... (including) invasive species, altered disturbance regimes, and climate change... Agency and public concern about some of these threats has led to (various efforts) to help facilitate restoration actions. Nevertheless, the magnitude of ecosystem restoration needs greatly exceeds the organizational and financial capacity of the agency. Many... ecosystems continue to degrade at a preventable rate.”



Limitations to implementation of ecological restoration: Budget



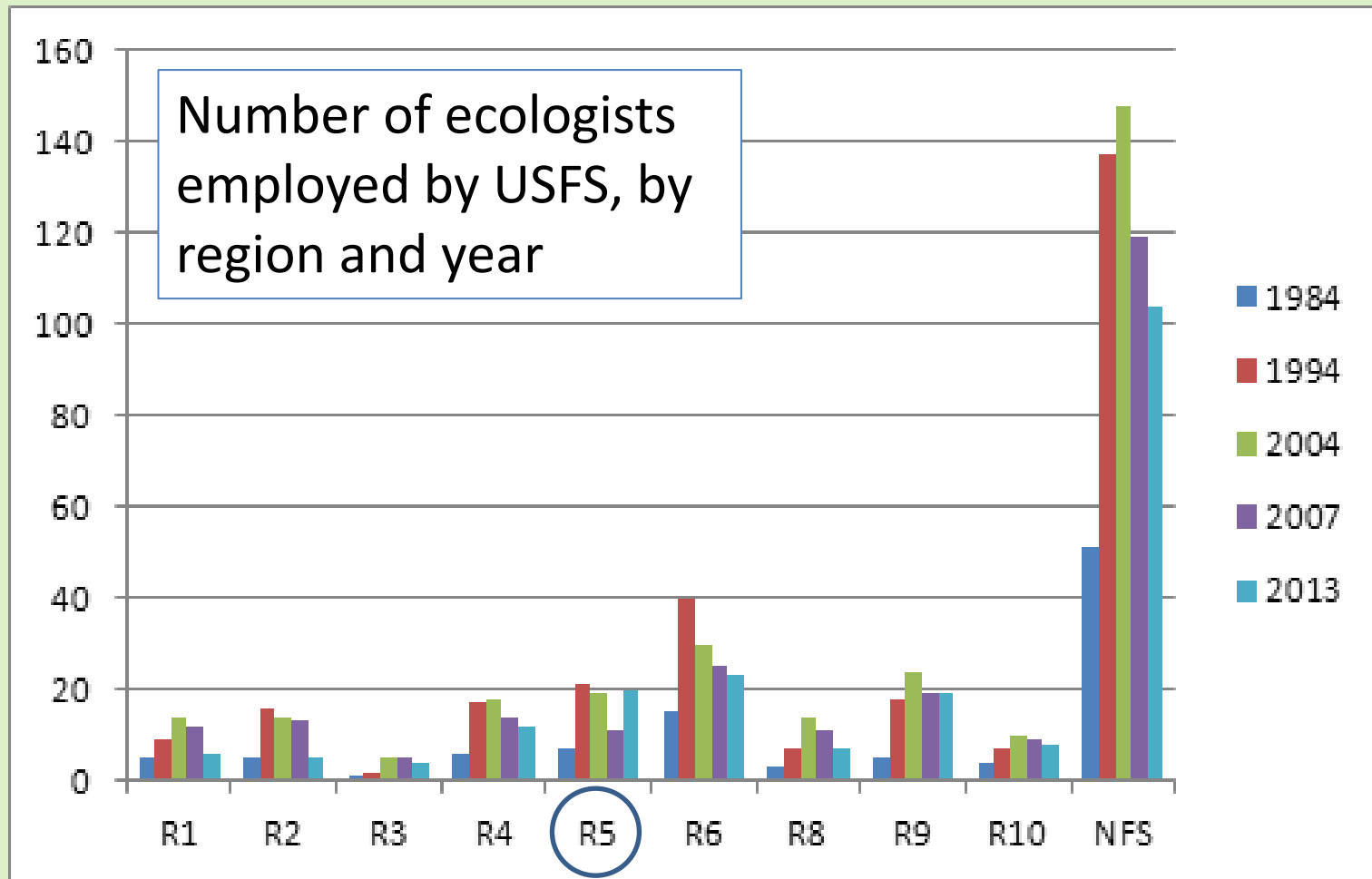
Limitations to implementation of restoration: Staffing



<http://www.fs.fed.us/aboutus/budget/>



Limitations to implementation of restoration: Organization



Additional limitations to implementation of restoration in chaparral landscapes

- National focus on forested landscapes
- Lack of experience
 - Chaparral traditionally left to “heal itself” after disturbance
 - Sometimes considered undesirable
- Lack of tools/procedures
 - Most work in shrubland restoration has been in coastal sage scrub or maritime chaparral
- Difficult nature of the problem
 - Steep slopes, erosive soils, recurrent fire, expensive...
- Lack of concerted, collaborative approach

Solutions?

- Collaborations/partnerships
 - Interagency, NGOs, private enterprise
 - Chaparral Restoration Initiative, National Forest Foundation, Coca Cola, etc.
- Development of restoration tool box
 - Learning from other Mediterranean climate areas, small scale pilot projects, extensions from related ecosystem types (CSS)
- Funding
 - Mitigation funding for powerlines, pipelines, sediment storage
 - S. Cal Edison, County and City of LA, Pacific Pipeline
 - Resources are beginning to become available for chaparral restoration on large landscapes
 - US Dep't of Justice fire cost recovery program



Fire cost recovery litigation

Fire settlement funds received by the Forest Service for the restoration of fire areas provide a unique opportunity to

- reverse ecosystem degradation,
- restore ecosystem health and resilience,
- rehabilitate damaged infrastructure,
- prepare impacted landscapes for the effects of changing climates and human use patterns.



According to US Code 16 USC 579c:

- “ Any moneys received by the United States...as a result of a judgment, compromise, or settlement of any claim, involving present or potential damage to lands or improvements...are hereby appropriated and made available until expended to cover the cost to the United States of any improvement, protection, or rehabilitation work on lands under the administration of the Forest Service rendered necessary by the action which led to the forfeiture, judgment, compromise, or settlement.”



SoCal fire settlements

Over \$400 million recovered in California

- \$300 million returned to National Forests
- \$50 million to SoCal

- Burro Fire, Angeles National Forest, \$97,000
- Copper, Angeles, \$26,781,702
- Grass Valley, San Bernardino, \$2,499,899
- Hauser, Angeles, \$11,663
- Piru, Los Padres, \$4,715,789
- Ranch, Angeles/Los Padres, \$956,000
- Zaca, Los Padres, \$14,550,000
- Witch, Cleveland, \$_____



Settlement funds gained through litigation or settlement must meet three key criteria from 16 USC 579c. Funds may be used:

- To conduct improvement, protection, or rehabilitation work,
- On lands administered by the Forest Service,
- For purposes rendered necessary by the fire in question.



Freds Fire Restoration Strategy 2012



Cover photo: Eight years after the Freds fire (May 2012). Note Sugarloaf in the background,
photo Steve Markman.

The intent of the __Fire Restoration Strategy is to provide a framework for the medium- and long-term restoration of the area affected by the fire.

Restoration work carried out under the __Fire Restoration Strategy will:

- Assist the recovery of ecosystems that were degraded, damaged or destroyed by the __Fire
- Result in more sustainable, resilient, and healthy ecosystems, with a focus on probable future conditions and climates in the restoration area
- Adopt an interdisciplinary landscape approach to accelerate the scale and pace of ecosystem restoration
- Ensure the strategy and any subsequent proposed actions are linked to the restoration objectives laid out in the __National Forest Land and Resource Management Plan (Forest Plan) and any amendments
- Ensure alignment of the strategy and proposed actions with the USDA Forest Service Ecological Restoration Framework, the Region 5 Ecological Restoration Leadership Intent, and FSH 2020 (Ecological Restoration, still in development)
- Utilize current scientific knowledge for landscape restoration, including – where appropriate – information synthesized in PSW-GTR-220 *An Ecosystem Strategy for Mixed Conifer Forests*, and PSW-GTR-237 *Managing Sierra Nevada Forests*
- Where the fire affected area is shared between more than one National Forest, be developed in coordination among the affected units
- Monitor the success of restoration efforts in the __Fire landscape and adapt the strategy when appropriate



We've recently developed a template to guide development of strategies for postfire restoration

Freds Fire Restoration Strategy 2012



Cover photo: Eight years after the Freds fire (May 2012). Note Sugarloaf in the background, photo Steve Markman.

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Appendix A - Project Proposal Template

Fire Restoration Project Proposal Template

Project Name: _____

Project Leader Name: _____

Link to Restoration Strategy desired condition and goal: (state specific desired condition and goal from Strategy)

Objective: (either link to an objective from the Restoration Strategy, or develop a clearly stated objective that links to a desired condition and goal in the Strategy. Objectives are specific, narrowed statements of intentions that are measurable. Progress toward an objective can be evaluated through monitoring)

Project justification: (state how project meets 16 USC 579c criteria and criteria set by court decision; state how project meets need identified in the Fire Restoration Strategy; if project proposes work beyond the fire perimeter, clearly describe why this is necessary)

Project description: (what is being proposed and by whom it will be accomplished [Forest staff, contract, enterprise team, agreement, etc.], identify whether assessment, planning, implementation or monitoring. If implementation, describe how progress toward overarching objective will be measured)

Monitoring and evaluation: (State monitoring objective, methods, data to be collected and how they will address the monitoring objective, statistical design for quantitative monitoring, how frequently monitoring will be conducted, frequency of evaluation, standards used in evaluation, trigger points for success or adjustment of project)

Estimated cost and timeline: (Complete Workplan for the project, identify whether multi-year and cost by year)



THANKS

