

Board Meeting AGENDA

September 2 – 3, 2015

Butte County – North Central Subregion



SEPTEMBER 2, 2015

Board Tour

1:00 – 4:30 p.m.

Members of the Board and staff will participate in a field trip to explore issues and activities related to Forest Health in the North Central Subregion. Members of the public are invited to participate in the field tour but are responsible for their own transportation and lunch. The tour will start in the main parking lot of the Paradise Comfort Inn located at 5475 Clark Road, Paradise, CA 95969.

Reception

5:00 – 6:30 p.m.

Following the Board tour, Boardmembers and staff will attend a reception open to the public. The reception will be held at the Gold Nugget Museum located at 502 Pearson Road, Paradise, CA 95969.

SEPTEMBER 3, 2015

Board Meeting

*Paradise Elks Lodge
1100 Elk Lane
Paradise, CA 95969*

9:00 a.m. – 1:00 p.m.
(End time is approximate)

- I. Call to Order**
- II. Roll Call**
- III. Approval of June 4, 2015, Meeting Minutes (ACTION)**
- IV. Public Comments**
Provide an opportunity for the public to comment on non-agenda items.
- V. Board Chair's Report**
- VI. Executive Officer's Report (INFORMATIONAL)**
 - a. Administrative Update
 - b. Policy and Outreach Update
 - c. SNC Tribal Consultation Policy
 - d. Proposition 1 Grant Update
 - e. Miscellaneous Updates
- VII. Deputy Attorney General's Report (INFORMATIONAL)**
- VIII. SNC Strategic Action Plan (INFORMATIONAL)**
The Board will review the Draft 2016-19 Strategic Action Plan, hear public comment, and provide direction to staff on revisions to the Draft Plan.

- IX. Sierra Nevada Watershed Improvement Program (INFORMATIONAL)**
The Board will be updated on the progress of the Sierra Nevada Watershed Improvement Program.
- X. Policy-Related Science and Research Overview (INFORMATIONAL)**
Staff will provide the Board with an overview or relevant research, studies and reports relative to key policy areas affecting the SNC and its activities.
- XI. Boardmembers' Comments**
Provide an opportunity for members of the Board to make comments on items not on the agenda.
- XII. Public Comments**
Provide an opportunity for the public to comment on non-agenda items.
- XIII. Adjournment**

Meeting Materials are available on the SNC Web site at www.sierranevada.ca.gov. For additional information, or to submit written comment on any agenda item, please contact Ms. Armstrong at (530) 823-4700, toll free at (877) 257-1212; via email to tristyn.armstrong@sierranevada.ca.gov; in person or by mail at: 11521 Blocker Drive, Suite 205, Auburn CA 95603. For reasonable accommodations, including documents in alternative formats, please contact Ms. Armstrong at least **five (5)** working days in advance.

Closed Session: Following, or at any time during, the meeting, the Board may recess or adjourn to closed session to consider pending or potential litigation, property negotiations, or personnel-related matters. Authority: Government Code Section 11126, subdivision (e)(2)(B)(i).

Board Meeting MINUTES

June 4, 2015

North Fork Rancheria Community Center

56900 Kunugib Way

North Fork, CA 93643



I. Call to Order

Board Chair BJ Kirwan called the meeting to order at 9:05 a.m.

II. Roll Call

Present: Jerry Bird, Louis Boitano, Burt Bundy, Todd Ferrara, Pam Giacomini, Ron Hames, Allen Ishida, Bob Johnston, Bob Kirkwood, BJ Kirwan, Ruben Leal, Jennifer Montgomery, Eraina Ortega, and Woody Smeck

Absent: John Brissenden

Maryann McGovran, Tribal Council Chairperson for North Fork Rancheria of Mono Indians, introduced newly elected Tribal Council Member Gary Walker, discussed a number of projects that the tribe has been working on in the area, and welcomed the Board to North Fork.

III. Approval of March 5, 2015, Meeting Minutes (ACTION)

Action: Boardmember Kirkwood moved and Boardmember Hames seconded, a motion to approve the March 4, 2015, Meeting Minutes. The motion passed unanimously.

IV. Public Comments

No public comment.

V. Board Chair's Report

Board Chair BJ Kirwan thanked everyone involved with the previous day's tour, with a special thanks to Elissa Brown, and called attention to the current budget challenges the Sierra Nevada Conservancy (SNC) is facing. Kirwan congratulated Bob Kingman on his promotion to the Assistant Executive Officer (AEO) position.

VI. Executive Officer's Report (INFORMATIONAL)

Executive Officer Jim Branham welcomed Bob Kingman to the AEO position and discussed a few of the programs that Kingman will be responsible for in his new role. Branham also noted that staff member, Tristyn Armstrong, would be taking on the role of Board Liaison, in place of Theresa Burgess. Branham recognized the work that Burgess has done as Board Liaison and thanked her for her efforts.

a. Administrative Update

Branham introduced Administrative Services Chief Amy Lussier, who gave an update on SNC's current Environmental License Plate Fund (ELPF) budget reduction requests noting that staff has been working to focus efforts on SNC

priority projects, and would continue to adjust activities and staffing to meet available funding.

Boardmember Todd Ferrara confirmed that SNC and many other departments who receive funding from the ELPF were being asked to reduce spending to achieve a savings target. The Board discussed the current status and future of the ELPF, with particular interest in impacts to SNC programs and activities and re-emphasis on the need to pursue other funding opportunities. Staff assured the Board that the Grant Program and the Sierra Nevada Watershed Improvement Program (WIP) would remain the SNC's top priorities, adding that efforts under the WIP would provide opportunities for additional funding conversations with other agencies.

b. Policy and Outreach Update

Branham introduced Angela Avery, Regional Policy and Programs Chief, who provided an update on SNC's policy and outreach activities. Avery discussed efforts by staff to meet with a variety of state agencies to discuss addressing funding and policy challenges needed in the Region. Avery also mentioned the work that staff has been doing with the United States Forest Service's (USFS) communications team to brand and promote the WIP, and the work staff has been doing to support other media opportunities for the SNC. Avery updated the Board on the status of legislation that SNC has been tracking, including the status of two pieces of legislation that will directly impact SNC activities. Avery also provided the Board with an update on sponsorship and promotional materials for the 2015 Great Sierra River Cleanup.

Boardmember Pam Giacomini asked about SNC's engagement with CAL FIRE's Forest Climate Action Team (FCAT). Avery and Branham responded that SNC has been closely involved in the development of the FCAT's report, but noted that there are still some challenges the Team is facing related to biomass.

Branham updated the Board on a meeting that Boardmember John Brissenden helped to arrange with the California Insurance Commissioner and several representatives from the insurance industry on the current conditions within the Sierra Nevada Region. Branham noted that the insurance representatives were interested in the work that SNC has been doing, and that SNC will continue to engage with the insurance industry as appropriate.

Boardmember Jennifer Montgomery and Avery discussed a Climate Change symposium being hosted by the California Natural Resources Agency in August.

Boardmembers discussed the challenges that the forests in the Region are facing due to the lack of biomass infrastructure in the Sierra Nevada Region.

Branham noted that the support within the state for biomass is growing, even though a number of biomass plants in the valley have been closing. Branham highlighted a bill by Assembly Member Brian Dahle that is focused on supporting biomass infrastructure and noted that it is currently being considered by the legislature. Branham also mentioned efforts being undertaken by the Association of California Water Agencies to support healthy forests in California's headwaters.

c. Strategic Plan Revision Update

Branham and Avery provided the Board with a proposal for the SNC's next strategic plan and action plan update. Avery proposed combining the strategic plan and the action plan into one complete document and requested a Board Subcommittee work with SNC staff to provide input on the proposal. Avery noted that staff is recommending that a draft proposal be brought to the Board by the September Board meeting

Board Chair BJ Kirwan said that Brissenden has offered to be on the Subcommittee, and asked that Montgomery also serve on the Subcommittee.

d. Rim Fire Grant Report

Branham gave the Board an update on the projects that staff has been considering for funding through the \$1 million Proposition 84 funds that the Board set aside for Rim Fire restoration in 2013. He noted that he had approved a second project under the authority delegated to him by the Board. The project will lead to a number of on the ground restoration projects in the burn area.

e. Miscellaneous Updates

Branham reported to the Board that he had received awards this year from both the California Forestry Association and the Motherlode Chapter of the Sierra Club on behalf of the work that SNC has been doing in the Region.

He updated the Board on a Memorandum of Understanding (MOU) that SNC and the USFS signed with the Sierra Resource Conservation District. Work under the MOU will further efforts in North Fork and allow the key next step of developing a ten-year Stewardship Contract with the Sierra National Forest to take place.

Branham also recognized Chris Nota of the USFS for her efforts with the WIP noting that she would be retiring at the end of the month, and expressed condolences to Izzy Martin of the Sierra Fund for the recent passing of her husband.

VII. Deputy Attorney General's Report (INFORMATIONAL)

Deputy Attorney General Christine Sproul gave the Board an update on proposed legislation and work by the Attorney General's Office to provide Proposition 1 Grant Guideline interpretations.

VIII. Proposition 1 Grant Guidelines (ACTION)

Bob Kingman, SNC Assistant Executive Officer, reported on the development of SNC's Proposition 1 Grant Guidelines and outlined three alternatives for Board consideration related to incorporating easement and acquisition projects as eligible projects. These project types had previously been eliminated from the eligible projects list by Board direction.

Boardmembers deliberated the three alternatives. Concerns about the appearance of biomass processing facilities as being once removed from watershed health and the ability of biomass facility funding to result in construction and implementation were raised and addressed. Boardmembers also considered whether incorporating acquisition for support of biomass facilities would provide the highest value, and best support the purposes of SNC and Proposition 1.

Questions about the more limited alternative recommended as a result of the limited funds available to SNC through Proposition 1 were discussed. A summary of Proposition 1 funding available from other agencies was shared together with assurances that staff considered those opportunities when developing the recommended alternative. Staff also confirmed that a variety of project types would be eligible through the Grant Program.

Board Chair BJ Kirwan recommended agendaing a discussion around SNC's support of acquisitions and conservation easements at a future meeting.

Public Comment:

Kerri Timmer of the Sierra Business Council commented that Conservancies are typically viewed by decision makers in Sacramento as funders for acquisitions only, and cautioned the Board that having the appearance of not being interested in funding acquisitions may make it hard for decision makers to see the value of providing funding to the SNC in the future.

Calaveras County Supervisor Chris Wright commented that it would be important for the SNC to continue to maintain the ability to use acquisitions as a tool in the toolkit and encouraged the Board to trust staff and applicants to bring the highest value projects forward.

Kingman read for the record a letter from Lisa Wallace of the Truckee River Watershed Council, encouraging the Board to consider funding for meadow restoration as well as stormwater management projects.

Bridget Fithian from the Sierra Foothill Conservancy encouraged the Board to maintain acquisitions as an eligible project type in the Grant Guidelines, and allow the staff and applicants to prove the benefit of the project. She also noted that acquisition grants received from the SNC have leveraged additional funds for forest health projects, and that they play a critical role in encouraging additional work in the Region.

Boardmembers noted that not including acquisition funding in this round of the Proposition 1 Grant Program did not mean that the SNC would be pulling away from supporting acquisitions in the future. They also emphasized that the amount of funding received from Proposition 1 was simply too small to include everything.

Action: Boardmember Kirkwood moved, and Boardmember Montgomery seconded, a motion to approve the Sierra Nevada Conservancy Proposition 1 Fiscal Years (FY) 2015-16 and 2016-17 Grant Guidelines, incorporating Acquisition Alternative #1, authorizing staff to make non-substantive changes as needed, and to take actions to implement the FYs 2015-16 and 2016-17 SNC Grant Program. The motion passed, with ayes 7 (Kirwan, Kirkwood, Montgomery, Giacomini, Hames, Ferrara, and Ortega), nays 4 (Johnston, Bundy, Ishida, and Boitano).

IX. Sierra Nevada Watershed Improvement Program (INFORMATIONAL)

Executive Officer Jim Branham gave the Board an update on the WIP since the launch of the program in March, noting that the WIP is starting to pick up momentum and support in Sacramento, and introduced Mandy Vance, project coordinator for the WIP. Vance thanked the Board, SNC staff, and the U.S. Forest Service Region 5 staff for their support of the WIP. Vance provided the Board with updates on the internal organization of the WIP, and presented the first restoration assessment completed by the Tahoe National Forest.

Vance clarified some of the terms included in the Tahoe National Forest's analysis for the Board, and also responded to a comment by Boardmember Bob Kirkwood about the funding needs and priorities identified in the analysis. Branham stated that the purpose of the analysis was to identify what level of work the Tahoe National Forest could accomplish if there were no funding constraints, and noted that the funding need may be considerably greater than originally anticipated. Boardmember Jerry Bird stated that the Tahoe National Forest's analysis was the pilot and that through the process they have established the template for other forests. Bird also stated that there is interest in making this foundational level of analysis part of the larger regional forest planning effort.

Boardmembers Burt Bundy and Jennifer Montgomery commented that competing priorities, watersheds that cross National Forest boundaries, and a

lack of understanding by people outside the watershed will be challenges for analysis. Branham and Vance stated that part of the goal of the WIP will be to assess the real constraints, and propose potential solutions to those constraints.

Boardmember Ron Hames requested that staff bring U.S. Forest Service Region 4 in to the conversation, as portions of the Eastern Sierra have lands in Region 4, while the rest of the Sierra Nevada is in Region 5.

Boardmember Woody Smeck thanked staff for their efforts on the WIP, and requested that staff consider pulling the National Parks Service and Army Corps into the conversation. Vance and Bird both noted the goal is to expand the WIP to additional partners, and clarified to the Board that efforts so far have been focused on establishing a process.

Vance and Bird also responded to a question by Boardmember Bob Johnston about whether analysis completed through the WIP would incorporate private lands.

- X. Joint Powers Agreement with the State Coastal Conservancy (ACTION)**
Executive Officer Jim Branham provided an update to the Board on the Joint Powers Agreement (JPA) entered in to between the State Coastal Conservancy (SCC) and the SNC to have the SNC act as the covenant holder on a property in Mendocino County on the SCC's behalf.

Boardmember Jennifer Montgomery asked about costs associated with the JPA that would affect existing projects. Branham responded that SNC would be reimbursed for any costs associated with the required activities.

ACTION: Boardmember Kirkwood moved, and Boardmember Johnston seconded, a motion to authorize the Executive Officer to enter into the joint powers agreement with the State Coastal Conservancy to implement their common powers to accept grants and undertake projects for the protection of the Eel River Property through Sierra Nevada Conservancy's Conservation Covenant Project. The motion passed unanimously.

XI. Boardmembers' Comments

Boardmember Jennifer Montgomery updated the Board on her participation in the Sierra Climate Adaptation and Mitigation Program and offered to provide additional information to any Boardmembers interested.

Boardmember Todd Ferrara congratulated staff on their great work putting together the Proposition 1 Grant Guidelines and encouraged staff to incorporate watershed language that would put a focus on forest health in watershed improvement and restoration.

Boardmember Ron Hames thanked Jim Branham for his presentation at the California State Association of Counties event. Hames also commented on the need to reframe the perspective around fuels reduction such that it takes on the same perspective as fire.

XII. Public Comments

Kerri Timmer of the Sierra Business Council (SBC) updated the Board on SBC's being named the Small Business Development Center for Northeastern California which means they have received a federal grant to provide small business development services to the northeastern location for California. In addition, Timmer noted that SBC has been working with SNC, the Governor's Office of Planning and Research, CAL FIRE, and the U.S. Forest Service on a federal program called the Natural Disaster Recovery Competition which is a one billion dollar nationwide effort to help build resilience and restore communities effected by natural disaster. Also, Timmer mentioned that the Sierra is being considered as an area for designation by the USDA's Resilient Lands and Waters Initiative.

Steve Hayes from the Sierra Resource Conservation District thanked staff for their support of the bioenergy facility in North Fork. Hayes noted that without the support of SNC and the U.S. Forest Service the project wouldn't be as far along as it is.

XIII. Adjournment

Board Chair BJ Kirwan adjourned the meeting at 12:00.

Current Status – Budget

The Sierra Nevada Conservancy's (SNC) 2014-15 budget closed as anticipated, spending \$4,066,574 of the \$4,381,906 Environmental License Plate Fund (ELPF) allocation. The remaining balance of approximately \$315,332 includes the \$315,000 cost saving drill requested by the Natural Resources Agency due to the ELPF shortfall. On June 24, 2015, Governor Brown signed the 2015-16 budget, which indicates that State revenues will continue to increase. Because of this, all staff received a 2.5% salary increase on July 1, 2015, as negotiated by Service Employees International Union (SEIU) in 2013. SNC will receive funding in early fall to cover the salary increases. Our base funding, which pays for staff, programs, and operations, was allocated at its regular amount but, due to the ongoing ELPF shortfall, we will not be spending \$310,000 to achieve the requested cost savings. We received \$200,000 of our Proposition 1 grant funds for two positions to support the program. The current status of SNC's 2015-16 budget can be viewed on page three of this report.

Current Status – Human Resources

Since our last Board meeting we have been busy recruiting, interviewing, and hiring to fill our six vacancies, as follows:

Andy Fristensky has been selected as our new Mt. Lassen Area Manager, reporting to Assistant Executive Officer, Bob Kingman. Andy started with us on August 3, and is based in Auburn. He will be responsible for overseeing field operations in the North, North Central, and Central Subregions. Andy graduated from Humboldt State University with a BS Degree in Natural Resources Planning and Interpretation, and comes to us after 20 years working for the National Park Service, the last 14 years at Yosemite National Park. Andy most recently served as the Branch Chief of Field Interpretation. He has extensive experience in supervising employees and volunteers, project planning and management, and handling natural resources and community issues.

Patrick Eidman has been selected as our new Grants Coordinator (funded under Proposition 1), reporting to Kingman. Patrick will start with us on August 31, and be based in Auburn. He graduated from Sonoma State University with a degree in Environmental Studies / City and Regional Planning and comes to us with extensive grants management experience working for the state of Colorado as the director of the Historic Preservation Technical Outreach Unit. During this time, he administered the statewide Certified Local Government subgrants program. Though Patrick comes to us from Colorado, he was born and raised in Nevada County, graduated from Nevada Union High School, and returns every year to staff the livestock office during the Nevada County Fair.

Randi Jorgensen has been selected as our new Mt. Whitney Area Manager, reporting to Kingman. Randi starts with us on September 1 and will be based in our Mariposa office. She will be responsible for overseeing field operations in the South Sierra, South Central Sierra, and East Sierra Subregions. Randi graduated from Georgia State University with a BA degree in Communications and an emphasis on public relations.

She comes to us from the Department of Toxic Substances Control where she has been a manager for more than fourteen years. Prior to working for the State, Randi spent twenty-three years as a Public Affairs Officer for the United States Forest Service. She has extensive experience in supervising, motivating, and coaching employees; creating and implementing public outreach plans; and training others to serve as spokespeople for natural disasters, including fire.

The interviews for the Area Representatives for the North Sierra Subregion (filling behind Linda Hansen) and South Central Subregion (Proposition 1-funded) will be conducted prior to this Board meeting. The final vacancy for a Policy Analyst (Kim Carr's position, with modifications) on the Policy and Outreach team will be advertised sometime in October.

The current SNC organizational chart can be viewed on page four of this report.

Recommendation

This is an informational item only; no formal action is needed by the Board at this time, although Boardmembers are encouraged to share their thoughts and comments.

2015-16 SNC BUDGET
 as of July 2015

ENVIRONMENTAL LICENSE PLATE FUND (ELPF) SUPPORT BUDGET	
<i>Personal Services</i>	<i>Budgeted</i>
SALARIES AND WAGES	1,965,419
STAFF BENEFITS	884,439
Total Personal Services	\$2,849,858
<i>Operating Expenses & Equipment</i>	
GENERAL EXPENSE	49,468
PRINTING (outside printing, copier maintenance)	12,786
COMMUNICATIONS (phones, delivery services)	33,400
POSTAGE	3,727
VEHICLE INSURANCE	4,392
TRAVEL	79,000
TRAINING	20,000
FACILITIES	279,744
UTILITIES	18,600
CONTRACTS- INTERAGENCY AGREEMENT	484,688
CONTRACTS- EXTERNAL	225,982
INFORMATION TECHNOLOGY	60,200
PRO RATA (control agency costs)	260,955
VEHICLE OPERATIONS	23,200
Total Operating Expenses & Equipment	\$1,556,142
<i>ELPF Cost Savings Drill</i>	<i>-\$310,000</i>
Total ELPF Support Budget	\$4,096,000

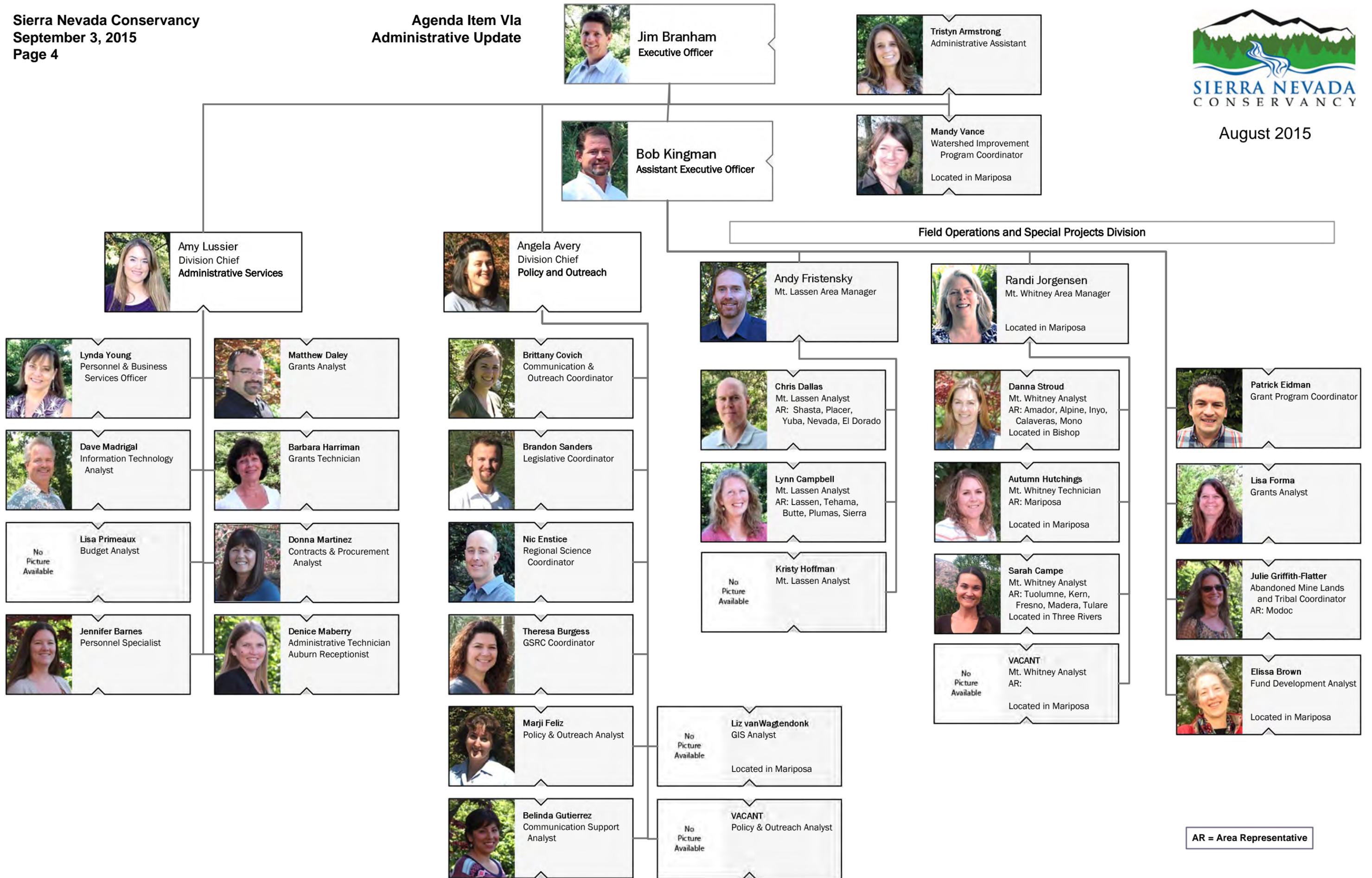
PROPOSITION 1 SUPPORT BUDGET	
<i>Personal Services</i>	<i>Budgeted</i>
SALARIES AND WAGES	135,870
STAFF BENEFITS	61,142
Total Personal Services	\$197,012
<i>Operating Expenses & Equipment</i>	
GENERAL EXPENSE	0
TRAVEL	2,988
Total Operating Expenses & Equipment	\$2,988
Total Proposition 1 Support Budget	\$200,000

PROP 84 SUPPORT BUDGET	
<i>Personal Services</i>	<i>Budgeted</i>
SALARIES AND WAGES	101,903
STAFF BENEFITS	41,097
Total Personal Services	\$143,000
<i>Operating Expenses & Equipment</i>	
GENERAL EXPENSE	0
TRAVEL	2,000
Total Operating Expenses & Equipment	\$2,000
Total Prop 84 Support Budget	\$145,000

Agenda Item VIa
 Administrative Update



August 2015



AR = Area Representative

Background

A priority area of activity for SNC staff is the development and implementation the Sierra Nevada Watershed Improvement Program (WIP) (see Agenda Item IX). In addition to activities in support of the WIP, staff continues to engage in legislative/policy and outreach/communications tasks with goals of raising the profile of the Sierra Nevada, and educating legislators and key-decision makers about the value our Region has to the entire state.

Current Status

Meetings and Legislative Actions

In July, the Governor signed AB 985 authored by Assembly Member Brian Dahle. This SNC-sponsored measure establishes a deeper relationship between the SNC and the State Legislature by authorizing each house to identify two members to serve as liaisons to the SNC and its Board. Staff is now strategizing with Mr. Dahle and others to identify potential legislators for these positions. The law takes effect January 1, 2016 and we hope liaisons will be identified shortly thereafter.

ACR 22, also by Assembly Member Brian Dahle, will establish the third week of September as Sierra Nevada Watershed Protection Week. The resolution drew 75 co-authors in the Assembly, and is pending passage in the State Senate, after which it will be recorded by the Secretary of State. This resolution and the establishment of Sierra Nevada Watershed Protection Week will support the Great Sierra River Cleanup and provide SNC with a means of communicating Sierra challenges and opportunities with not only members of the Legislature, but also the public-at-large in the years ahead.

Special thanks go out to Assembly Member Brian Dahle and his staff for their continued support, and also to SNC Legislative Affairs Coordinator Brandon Sanders for his work in developing and successfully advancing these measures on behalf of the SNC.

Formalizing our relationship with the Sierra Climate Adaptation and Mitigation Partnership (CAMP) being led by the Sierra Business Council, SNC signed on as an ex-officio (non-voting) member of the Sierra CAMP Steering Committee in August. Sierra CAMP is working toward a climate-adapted and resilient Sierra Nevada through a collaborative process being supported by the Governor's Office of Planning and Research (OPR), the Local Government Commission, and the Alliance of Regional Collaboratives for Climate Adaptation (ARCCA). SNC Boardmember Supervisor Jennifer Montgomery is actively involved in this effort. This is a unique opportunity to connect urban leaders to Sierra Nevada issues, and to demonstrate how what happens in the Sierra directly affects beneficiaries downstream.

Outreach and Communications

Staff continues to focus on supporting the communications needs of the WIP, and on keeping SNC activities highlighted on social media.

In late June, staff worked with the U.S. Forest Service and California Natural Resources Agency to have a portion of the Sierra Nevada Region included in [the designation of the California Headwaters as a Resilient Lands and Waters Region](#). President Obama's Priority Agenda for Enhancing the Climate Resilience of America's Natural Resources (released in October 2014) called for the identification of place-based, landscape-scale resilience strategies. The Resilient Lands and Waters Initiative works to identify regions where:

1. The selected lands and waters face a wide range of climate impacts and other ecological stressors related to climate change, including drought, wildfire, sea level rise, species migration, and invasive species.
2. The selected lands and waters have existing collaborative partnerships in place that can work together to prepare for and prevent these and other threats, and ensure that long-term conservation efforts take climate change into account.

While this designation didn't result in new funding for the Region, it did shine a light on the importance of the Sierra to California, and supported the work we strive to accomplish through the WIP. In addition, the regional planning work occurring through the WIP will feed into the report required by the Resilient Lands and Waters designation which will identify an initial list of priority areas for conservation, restoration, or other investments, to build resilience in vulnerable regions, enhance carbon storage capacity, and support management needs.

Additional information on the CA Headwaters Region and the Resilient Lands & Waters Initiative are available on the [National Oceanic and Atmospheric Association's web site](#). The press release and a recording of the media call hosted in June are available on the [USDA's web site](#). A number of comments from partner organizations are also posted on the [USDA's web site](#).

Great Sierra River Cleanup

The 7th annual Great Sierra River Cleanup (GSRC) will occur on Saturday, September 19. At the time of this writing, we have more than 66 organizations committed to cleaning up our Sierra waterways, representing the entire range of the Sierra Nevada Region. Additionally, all of our sponsors this year are return sponsors, including the California Conservation Corps (CCC), Sacramento Municipal Utility District (SMUD), Pacific Gas & Electric (PG&E), and Sierra Pacific Industries (SPI). The CCC is supporting the 2015 Most-Unusual-Item contest with prizes donated by Danner Boots and Mountainsmith.

A new outreach approach implemented this year includes asking Sierra Nevada Region Boards of Supervisors to help support the event and communicate their commitment to their constituents. Several Supervisors from the Region have agreed to post GSRC news and updates in newsletters, event calendars, and email blasts with links back to the GSRC website. We also have a handful of Supervisors interested in participating in cleanups in their areas!

GSRC legislative and media outreach efforts in support of the event will focus primarily on the Watershed Protection Week Resolution ([ACR 22](#)). Staff will promote the event via news releases and a social media campaign calling for volunteers, thanking sponsors, and sharing day of cleanup results, pictures, and winners of the contest.

GSRC is only 16 days away! If you haven't signed up for a cleanup in your area contact Theresa Burgess and she can help get you registered. Results from this year's cleanup will be distributed via email the week of September 21st.

Next Steps

Staff will continue to identify and implement legislative, outreach, and communications activities in support of Sierra Nevada Conservancy programs and activities. Specific activities will include continued active participation in the Forest Carbon Action Team (FCAT) - a working group being led by CAL FIRE to develop policy recommendations for spending Greenhouse Gas Reduction Fund (GGRF) monies in the forest sector. Staff will also be engaged with partners in the update of the Greenhouse Gas Reduction Fund Investment Plan, which will guide investment for the next three fiscal years.

Recommendation

This is an informational item only; no formal action is needed by the Board at this time, although Boardmembers are encouraged to share their thoughts and comments.

Agenda Item VIb Communications Update

Presented by:
Brittany Covich

Communications Update





Large, damaging wildfires threaten Sierra Nevada wildlife.

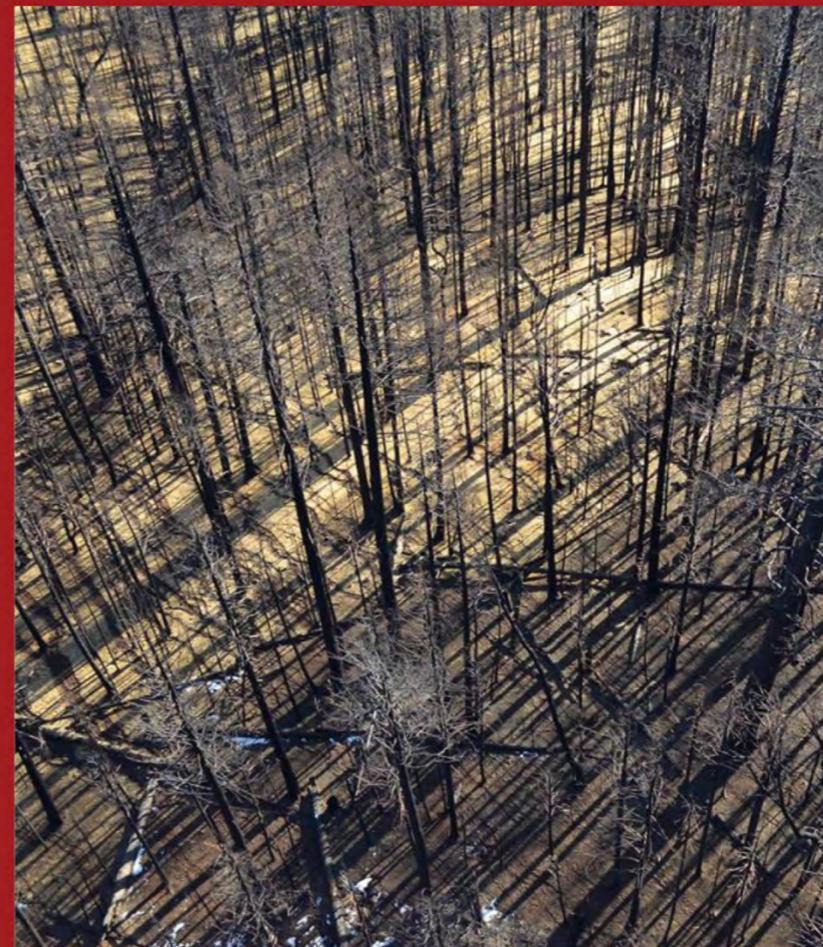


Pacific Southwest Region

It's their forest, too.
Which would *they* choose?



Photo credit: CA Watchable Wildlife-Gary Kunkle



#RestoreTheSierra



Pacific Southwest Region

Healthy forests in the Sierra Nevada filter and store water for California. Large, damaging wildfires threaten that.

It's your water. **You** choose.



Photo credit: Yosemite National Park



Photo credit: PCWA

#RestoreTheSierra



Pacific Southwest Region

A little smoke now prevents a lot of smoke later.

It's your air. **You** choose.



Photo credit: Susie Kocher



Photo credit: U.S. Forest Service

#RestoreTheSierra



Proactive forest management can save up to 3 times the cost of future fires.



Pacific Southwest Region

Invest now or pay later? **You** choose.



Photo credit: Susie Kocher



Photo credit: CAL FIRE

#RestoreTheSierra



Proactive forest management uses a little fire now to prevent a lot of fire later.



Pacific Southwest Region



It's your backyard. **You** choose.



Photo credit: Susie Kocher



Photo credit: U.S. Forest Service

#RestoreTheSierra



Overgrown forests in the Sierra Nevada increase the risk of large, damaging wildfires.



Pacific Southwest Region

It's your forest. **You** choose.



#RestoreTheSierra

Sierra Stories in Social Media

Air Resources Board @AirResources - Jun 30
 #CADrought conditions make #airquality worse, aggravate health problems buff.ly/1egTfoJ



View photo

Debris Flow Possible over Burn Scars south of I 80 this afternoon/evening

Burn Scars from 2013/14
 Heavy rain over a burn scar can lead to dangerous debris flow and flooding!

What to Expect:

- Heavy rainfall rates
- Flash flood and debris flow potential
- Downed trees and power lines
- Slippery roads



What to Do:

- Move to higher ground
- Stay away from rivers and streams
- Turn around, don't drown



Washington Fire Smoke Forecast

Forecast model estimates of where the smoke will be today and Tuesday, densest in dark red. (USFS - BlueSky)



- The Washington Fire is now estimated at 8900 acres and 10 percent containment
- Southwest winds today will take the smoke back into western NV with the densest smoke in the Smith and Mason Valleys – avoid strenuous outdoor activities!
- Tomorrow, winds will shift to the northeast, taking the smoke west into CA.
- Subtle changes in fire activity and wind direction can drastically change the smoke forecast!

NWS Reno @NWSReno - Jun 22
 #WashingtonFire smoke back in W. NV today, but then tracking toward CA Tues. Here is a smoke forecast estimate.

Lowell and Willow Fire Smoke

Late Evening- Mon AM:
 West winds will bring more smoke east of the Sierra.

Monday Afternoon:
 Northeast winds push areas of dense smoke west of the Sierra crest.

What should you do?

- ✓ Check local air quality conditions AirNow.gov
- ✓ Stay indoors with windows closed and A/C on if you have one
- ✓ Reduce activity and stay hydrated



Haze and smoke forecast for this afternoon and evening.

Background

In September 2011, Governor Jerry Brown issued Executive Order B-10-11, which among other things provided that it was the policy of the administration that every state agency and department subject to executive control, including conservancies, develop and adopt a Tribal Consultation Policy. The purpose of the Tribal Consultation Policy is to guide implementation of effective government-to-government consultation with California Indian Tribes (Tribes). The Sierra Nevada Conservancy's (SNC) Tribal Consultation Policy (SNC Policy), [Attachment A](#), presents the framework for how we will provide Tribes and tribal communities an opportunity to have meaningful input during the development of policies, programs, projects, and other activities that may affect tribal communities.

The Governor's Office of the Tribal Advisor, created under the same executive order, has shepherded the Governor's directive over the past couple of years. The first area of focus was compliance at the agency level of state government. Now that most state agencies have an adopted Tribal Consultation Policy, the Tribal Advisor is actively seeking compliance through the agencies for department and conservancy compliance.

The SNC Policy was developed in consultation with the Natural Resources Agency Tribal Liaison and the Office of the Tribal Advisor.

Current Status

A draft Policy was posted on the SNC Web site and disseminated to 42 Federally Recognized and Non-Federally Recognized Tribes within the Sierra Nevada Region for review and comment. The comment period ended on August 14, 2015.

Next Steps

All comments received will be considered and responses will be provided in writing and/or in person if requested. Any changes that are warranted as a result of tribal or public input will be incorporated into the SNC Policy prior to finalization.

SNC Staff will implement the guidelines and procedures outlined in the adopted SNC Policy.

Recommendation

This is an informational item only; no formal action is needed by the Board at this time, although Boardmembers are encouraged to share their thoughts and comments.

Agenda Item VIc
SNC Tribal Consultation Policy
Attachment A



POLICY & PROCEDURE

NUMBER: 043

CONTACT AREA:
Executive

TITLE:
Tribal Consultation

EFFECTIVE DATE:

APPROVED:
Jim Branham, Executive Officer

PURPOSE

The Sierra Nevada Conservancy (SNC) is a conservancy under the California Natural Resources Agency (Agency) and as such, has prepared this consultation policy consistent with the Agency's policy adopted on November 20, 2012.

The mission of the SNC is to initiate, encourage, and support efforts that improve the environmental, economic, and social well-being of the Sierra Nevada Region, its communities, and the citizens of California. California Native American Tribes (Tribes) have sovereign authority over their members and territories, and a unique relationship with California's resources. All Tribes and tribal communities, have distinct cultural, spiritual, environmental, economic, and public health interests, and unique traditional cultural knowledge about California resources.

The purpose of this policy is to ensure effective government-to-government consultation between the SNC and Indian Tribes and tribal communities to further this mission and to provide meaningful input into the development of policies, programs, projects, plans, property decisions, and activities that may affect tribal communities. The goal of the policy is to engage in the timely and active process of respectfully seeking, discussing, and considering the views of Tribes and tribal communities in an effort to resolve concerns of as many parties as possible.

BACKGROUND

On September 19, 2011, Governor Edmund G. Brown Jr., issued Executive Order B-10-11, which provides, among other things, that it is the policy of the administration that every state agency and department subject to executive control to implement effective government-to-government consultation with California Indian Tribes.

DEFINITION

This policy is not intended to replace or supplant obligations mandated by federal law. This policy defines provisions for improving SNC consultation, communication, and

collaboration with Tribes to the extent that a conflict does not exist with applicable law or regulations.

This policy anticipates a deliberate process that aims to create effective collaboration and informed decision making. All parties in the process should promote respect, shared responsibility, and an open and free exchange of information. The inclusion of Tribes and tribal communities throughout the decision-making process will promote positive, achievable, durable outcomes.

This policy is intended solely for the guidance of employees of the SNC and does not extend to other governmental entities, although the SNC encourages cooperation, education, and communication on the part of all governmental entities. This policy is not intended, and should not be construed, to define the legal relationship between the SNC and California Tribes and tribal communities. This policy is not a regulation, and it does not create, expand, limit, waive, or interpret any legal rights or obligations.

For purposes of this policy, the following definitions shall apply:

Tribe: Refers to a California Indian Tribe.

Federally Recognized Tribe: A tribal entity that is recognized as having a government-to-government relationship with the United States; these entities are listed on the Federal Register and the current list is posted on the Governor's Office of the Tribal Advisor's website.

Non-Federally Recognized Indian Tribe: Those Tribes that are not federally recognized and are on the list maintained by the Native American Heritage Commission.

California Indian Tribe: Refers to a federally-recognized California Indian Tribe, as listed on the Federal Register. Only in situations involving cultural resources will a non-federally recognized California Native American Tribe that is on the list maintained by the Native American Heritage Commission (NAHC) be included in this definition. The NAHC will provide a list of non-federally recognized California Native American Tribes for each instance.

Tribal Leaders: Refers to elected officials of Indian Tribes and their designees.

Tribal Sovereignty: Refers to the unique political status of federally-recognized Indian Tribes. Federally-recognized Indian Tribes exercise certain jurisdiction and governmental powers over activities and tribal members within its territory. Some of these powers are inherent, and some have been delegated by the United States. Existing limitations on tribal sovereignty are defined through acts of Congress, treaties, and federal court decisions.

PROCESS

Outreach: The SNC will identify the Tribes to consult at the earliest possible time in the planning process, and allow a reasonable opportunity for Tribes to respond and participate. The SNC is responsible for meaningful consultation with Tribes that promote regular and early consultation through communication and collaboration.

The SNC shall disseminate public documents, notices, and information to Tribes, and tribal communities. The documents, regarding the topic for consultation, shall be made readily accessible to tribes and be provided at the earliest opportunity. Notification should include sufficient detail of the topic to be discussed to allow tribal leaders an opportunity to fully engage in a substantive dialogue.

The SNC shall conduct meetings, outreach and workshops at times and locations that facilitate tribal participation as much as possible. The SNC will be open to communication opportunities initiated by Tribes and will seek opportunities for collaboration by communicating regularly with Tribes. The SNC will seek to protect any confidential information provided to the fullest extent allowed by the law.

Tribal Liaisons: The SNC will designate a tribal liaison, or liaisons, to serve as the central point of contact for Indian tribes. The role of the tribal liaison will be to ensure that outreach and communication efforts are undertaken in a manner consistent with this policy. Tribal liaisons should be encouraged and empowered to develop ongoing and regular communication with tribal representatives. Where possible and where consistent with administration policy and guidance, tribal liaisons should use these ongoing relationships to inform tribes of issues of interest.

Tribal Liaison Committee: The SNC-designated tribal liaison will participate on the CNRA Tribal Liaison Committee consisting of state department tribal liaisons that will meet on a regular basis in the Office of the Secretary to review tribal consultation efforts and opportunities, and share information.

Access to Contact Information: The SNC will utilize the contact list from the Governor's Tribal Advisor for the federally recognized Tribes and Native American Heritage Commission contact list for non-federally recognized Tribes.

Training: The SNC will provide training to tribal liaisons, executive staff, managers, supervisors, and employees on implementation of this policy as opportunities arise and are deemed appropriate.

Background

California voters passed Proposition 1, The Water Quality, Supply, and Infrastructure Improvement Bond Act of 2014, on November 4, 2014. Proposition 1 authorizes the state to issue bonds, and the legislature to appropriate the proceeds, for multi-benefit water quality, water supply, and watershed protection and restoration projects for the watersheds of the state.

Proposition 1 allocates \$25 million of these funds for grant making to the Sierra Nevada Conservancy (SNC). The SNC has developed a plan to award grants in three separate rounds over a six-year period beginning with a \$10 million appropriation in the 2015-16 Fiscal Year. At its June meeting, the SNC Board adopted Grant Guidelines that support the Sierra Nevada Watershed Improvement Program (WIP) and multiple other state plans, and authorized staff to implement the grant program.

SNC Proposition 1 Grant Guidelines and Grant Application Packet were reviewed and approved for posting by California Natural Resources Agency at the end of June and released to the public on July 1, 2015, announcing the start of the 2015-16, 2016-17 grant cycle.

Current Status

Area staff have been interacting with prospective applicants and partners throughout the region to identify projects and answer questions about grant requirements. Initial interest has been very strong and more than 20 conceptual projects have already been identified. The first application deadline for the 2015-16, 2016-17 grant cycle is September 1, and a verbal update will be provided at the September Board meeting.

Staff also continues to coordinate with other State agencies who are receiving Proposition 1 funds to facilitate funding for activities consistent with the SNC mission, but on which we are not currently focused. This will result in a more strategic and coordinated approach to investing Proposition 1 funds across the Region.

Next Steps

SNC staff will continue to provide technical assistance to prospective applicants until the submittal deadline. All submittals will be evaluated and analyzed by staff and subject-matter experts with the intent of bringing grant recommendations to the Board for consideration at the December 2015 and March 2016 Board meetings. In addition, SNC staff will begin working with project proponents planning to submit proposals for the March 1, 2016, application deadline.

Recommendation

This is an informational item only; no formal action is needed by the Board at this time, although Boardmembers are encouraged to share their thoughts and comments.

Background

In September 2011, the Board adopted a Strategic Plan which established objectives for the Sierra Nevada Conservancy (SNC) within five areas of focus and laid out the strategies the organization would employ in meeting those objectives. The areas of focus included:

- Healthy Forests
- Preservation of Ranches and Agricultural Lands
- Watershed Protection and Restoration
- Promotion of Sustainable Tourism and Recreation
- Long-term Effectiveness of the SNC

Annual Action Plans have been used to identify the specific initiatives and activities planned for the year, based on available resources and existing opportunities and conditions. The Board approved the most recent Action Plan in June 2014.

Also in June 2014, the Board directed staff to refocus and increase efforts related to healthy forests in recognition of the dire conditions and urgent need for action in many of the forests in the Sierra Nevada. Per that direction, staff developed the Sierra Nevada Forest and Community Initiative (SNFCI) Action Plan which was approved by the Board in September 2014. In addition, the Board approved the Watershed Improvement Program (WIP) at the March 2015 meeting, building upon the SNFCI Action Plan.

In June 2015, staff obtained approval from the Board for SNC to continue to operate under the 2014-15 Action Plan through the end of calendar year 2015. Staff also solicited Board and public comment on a draft proposal for revising the Strategic Plan and developing a new Action Plan.

Current Status

Since the June 2015 Board meeting, staff has developed a Draft 2016-19 Strategic Action Plan (SAP), [Attachment A](#). The draft was reviewed with the Board committee, which is comprised of Boardmember John Brissenden and Boardmember Jennifer Montgomery, appointed at the last Board meeting.

The complete SAP to be presented to the Board in December will have two components, a 2016-19 Strategic Plan and an Action Plan comprised of specific actions to be implemented from January 2016 to June 2017. The current draft SAP contains the Strategic Plan component and reflects the prioritization of the Sierra Nevada WIP and the new Proposition 1 Grant Program. The 2016-17 Action Plan will be developed following Board review and input on the draft Strategic Plan component.

Four programs are proposed as the focus of SNC efforts from January 2016–June 2019:

- Watershed Improvement Program
- Grant Program
- Abandoned Mine Lands
- Regional Recreation and Tourism

Notable changes from the SNC's 2011 Strategic Plan include:

- While four programs are proposed, the WIP and the Proposition 1 Grant Program are clearly identified as the top priorities. Abandoned Mine Lands, and Regional Recreation and Tourism will continue to have some level of resources dedicated to them, but are not viewed in the same way as WIP and Proposition 1.
- The Strategic Plan component identifies certain activities that are ongoing, and as such, are important to call out, but do not rise to the level of the programs. These activities are addressed in a new section entitled "Ongoing Activities."

For each of the four programs, draft strategies have been developed. Each strategy reflects an approach taken to achieve a [statutory goal](#) associated with one of the proposed programs. Following is an overview of the proposed strategies for each program; see [Attachment A](#) for additional details.

- **Watershed Improvement Program (WIP)**
 - **Policy**
 - Utilize current, relevant science to inform and engage partners and key policy decision makers, and to impact policy and investment decisions at the state and federal levels in multiple arenas.
 - Work with partners to identify and complete necessary, relevant scientific research to inform activities under the WIP and to effect necessary policy modifications.
 - Develop and maintain relationships with legislators, key decision-makers, state agencies, local governments, and partners in support of sound, science-based policy decisions that benefit the WIP and the Sierra Nevada Region.
 - Actively participate in the development and implementation of state policy, and administrative and planning processes that generate policy. Ensure that the WIP is a strategic component of the resulting plans.
 - Utilize the results of the WIP watershed-by-watershed analyses to identify policy opportunities that address local needs and issues.
 - Identify and pursue policy opportunities that result in funding to benefit the WIP and the Sierra Nevada Region.

- **Restoration Implementation**
 - Phase 1
 - ❖ In close partnership with federal, state, and local agencies, and diverse stakeholders, identify and consolidate information in the WIP Regional Strategy describing the background conditions and recommendations for overarching regional needs in the issue areas of water reliability and quality, fire/forest health, greenhouse gas emissions reduction and long-term carbon sequestration/storage, and habitat/biodiversity. The Regional Strategy will help to engage a wide range of partners and serve as a basis for more localized efforts.
 - ❖ Utilize local knowledge and partnerships to identify key data, stakeholders, plans, initiatives, collaborative efforts, restoration needs, and barriers to restoration that cover a range of watershed health issues.
 - ❖ Maximize efficiency of project planning and implementation through a coordinated National Environmental Policy Act (NEPA) and California Environmental Quality Act (CEQA) environmental review process.
 - ❖ Work with the U.S. Forest Service, Bureau of Land Management, National Park Service, and other federal, state, and private landowners to assess restoration needs and costs required at the watershed level to achieve a state of resilience.
 - Phase 2
 - ❖ Engage key partners in the WIP at the watershed level, including doing watershed-level and specific project planning needed for restoration on all lands. This strategy includes estimating project costs, with the goal of matching existing funding and identifying new project funding sources.
 - ❖ Cultivate new funding streams for restoration projects in the Sierra Nevada.
 - ❖ Identify and act upon the policy areas impacting the increase of pace and scale of restoration in the watersheds of the Sierra Nevada for which we have a wider window of opportunity for influence.
 - ❖ Work with partners to identify and develop an information hub where the most current regional and watershed-level information can be found regarding key policy issues affecting the pace and scale of restoration of our watersheds, funding opportunities and existing investments in watershed health, partners and collaborative opportunities, and specific restoration projects in need of funding.
- **Funding**
 - Coordinate with other agencies to strategically fund projects under the WIP.
 - Work with other agencies on grant guidelines to ensure regional resource needs and issues are addressed.

- Increase effectiveness of funding programs by addressing prerequisites such as CEQA/NEPA compliance.
 - Provide user-friendly information about grant opportunities to WIP partners.
 - Provide technical assistance to increase capacity of regional partners to apply for and administer grant funds.
 - Track funding coming to the Region by types of funders, types of projects funded, and amounts leveraged or matched.
 - Expand and secure funding from new sources to support the SNC and the programs of the WIP.
- **Communication**
 - Develop messaging and materials that:
 - ❖ Increase awareness among policymakers and the public about the important role the Sierra Nevada Region plays in California's overall economic, social, and environmental health and well-being.
 - ❖ Convey the risks the Sierra Nevada Region is currently facing, and explain the consequences of not restoring the Region to a state of resilience.
 - ❖ Support the needs identified by the funding, policy, and implementation goals of the WIP.
 - Utilize the most effective tools to deliver our message, including both traditional and new media, to engage our target audiences.
 - Engage key partners and establish a communications network that can maximize the communication efforts of the WIP through coordinated outreach.
 - Utilize current events as opportunities to increase awareness among policymakers about the benefits provided by healthy Sierra forests and watersheds, and the actions needed to improve, maintain, and enhance those benefits.
 - Increase participation in events, such as field tours and conferences, which support the overall goals of the WIP and engage new members of our target audience.
 - **Grant Program**
 - **Proposition 84 Wrap-Up**
 - Allocate remaining Proposition 84 funding to Rim Fire restoration projects.
 - Close out remaining projects.
 - Implement grant process improvements as identified by the California Department of Finance during its regular agency audit.
 - Evaluate the overall effect of the Proposition 84 Grant Program, quantifying the cumulative impact on the SNC Region.

- **Proposition 1 Implementation**
 - Support the WIP and state plans such as the California Water Action Plan by funding:
 - ❖ Fuel treatment projects that reduce wildfire risks, protect watersheds tributary to water storage facilities, and promote watershed health.
 - ❖ Projects that protect and restore rural and urban watershed health in order to improve watershed storage capacity, forest health, safety of life and property, and greenhouse gas reductions.
 - ❖ Watershed adaptation projects in order to reduce the impacts of climate change on California's communities and ecosystems.
 - Maximize the impact of Proposition 1 funding by coordinating with other Proposition 1 funding agencies and leveraging other sources of funds in order to implement landscape-scale projects.
- **Abandoned Mine Lands (AML)**
 - Facilitate protection of the Region's resources by assisting in the development of a California Natural Resources Agency policy reducing liability and monetary risks associated with acquisition of land impacted by AML.
 - Contribute to the efforts of the California Abandoned Mine Land Agency Group, The Sierra Fund, the Delta Tributaries Mercury Council, and other partners to educate policymakers and identify and pursue AML remediation work.
 - Explore funding opportunities and provide information and assistance regarding these opportunities to entities seeking to implement AML cleanup projects.
- **Regional Recreation and Tourism**
 - Forge strategic partnerships among Regional recreation interest groups and communities to identify opportunities for the development and implementation of sustainable recreation infrastructure and experiences such as trails, facilities, and enhanced interpretive and educational projects.
 - Build upon efforts like those of the Eastern Sierra Recreation Collaborative to facilitate collaborative processes that develop sustainable recreation strategies among gateway communities and land management agencies in order to meet the recreation demands in the Region.
 - Continue a level of support for the Sierra Nevada Geotourism Project to help promote the Region's cultural and heritage resources.
 - Build local and Regional capacity through researching and identifying increased funding opportunities to support sustainable recreation and tourism development throughout the Sierra Nevada.
 - Support ongoing training, education, and promotion efforts to develop additional agritourism producers in the Region.

In addition to the four programs described above, the SNC proposes to continue work on a number of activities that were initiated under previous Strategic Plans, and engage in the following activities related to the long-term effectiveness of the organization:

- Actively pursue new and enhanced funding streams in support of the SNC, including existing and potential opportunities.
- Work with better-funded state agencies to bring a higher proportion of state funding to support projects.
- Investigate potential fee-for-service opportunities with other organizations, or other potential new sources of income.
- Improve the SNC's visibility, and publicize our work with decision-makers and the public to improve knowledge of our program successes and our mission.

The draft SAP is being presented to the Board and public for review and comment. To facilitate today's discussion of the document, staff have prepared a few questions for consideration (see attached [Presentation](#)).

Next Steps

Staff will review input from the Board and the public with the Board committee, and incorporate appropriate changes into the Draft SAP. Staff will solicit input from stakeholders, partners, and the public on the Strategic Plan component and will make the Action Plan component available for a two-week public comment period prior to the December Board meeting. Staff will bring the complete Draft SAP to the Board in December 2015 for possible approval.

Recommendation

This is an informational item only; no formal action is needed by the Board at this time, although Boardmembers are encouraged to share their thoughts and comments.

Agenda Item VIII
SNC Strategic Action Plan
Attachment A

Draft Strategic Action Plan



About the Sierra Nevada Conservancy

The Sierra Nevada Conservancy (SNC) is a state agency created by bi-partisan legislation co-authored by Assembly Members John Laird (D-Santa Cruz) and Tim Leslie (R-Tahoe City). Assembly Bill 2600, the Laird-Leslie Sierra Nevada Conservancy Act, was signed into law by Governor Arnold Schwarzenegger in September 2004. The SNC has a broad mission based on the understanding that the environmental, economic, and social well-being of the Region and its rural communities is closely linked, and that the Region would benefit from an organization providing strategic direction and bringing attention and resources to the Region to better understand and meet its needs.

The mission of the SNC is to initiate, encourage, and support efforts that improve the environmental, economic, and social well-being of the Sierra Nevada Region, its communities, and the citizens of California.

Introduction

Document Overview

This Strategic Action Plan (SAP) has two components, a Strategic Plan and an Action Plan. The Strategic Plan contains descriptions of the four programs the SNC will focus on from January 2016 through June 2019. The Strategic Plan also contains strategies to implement each program and address the statutory goals associated with each program.

The Action Plan component contains specific actions to implement the strategies associated with each of the four programs, based on available resources and existing opportunities and conditions. Over the life of the SAP, there will be three separate Action Plans. The first Action Plan covers the period from January 2016 through June 2017. Each subsequent Action Plan will cover a 12-month period, with the final Action Plan covering July 2018 through June 2019.

Context

The scope of the SAP has been determined in response to Board direction to narrow the focus of SNC activities, as well as an environment of new budgetary restrictions that has constrained SNC resources.

Consideration of Other State Plans

This SAP builds upon and integrates a number of state efforts, including:

- California Water Action Plan and associated Implementation Plan
- Bioenergy Action Plan
- State Water Plan

- Safeguarding California Climate Adaptation Plan/Assembly Bill 32 Scoping Plan Update
- Greenhouse Gas Reduction Fund Investment Plan Updates and Guidelines Development
- State Wildlife Action Plan
- California Fire Plan

Background

Our Vision

The SNC's vision for the future is that the magnificent Sierra Nevada Region enjoys outstanding environmental, economic, and social health, with vibrant communities and landscapes sustained for future generations. In this vision:

- Rich and diverse natural, physical, and living resources are protected and conserved.
- Healthy, diverse, and economically sustainable local communities thrive, prepared for and protected from natural disasters.
- Californians value and invest in healthy watersheds that provide high quality water, spectacular scenery, and important wildlife habitat.
- Sustainable working landscapes provide environmental, economic, and social benefits to the Region.
- The Region's cultural, archeological, and historical resources are preserved, visited, and treasured.
- Healthy and sustainable tourism, recreation, and commercial activities are valued and encouraged.
- The role of the forest in sequestering and storing carbon and reducing greenhouse gas emissions is recognized and enhanced.

Our Service Area

The SNC's service area – stretching from Modoc County in the north to Kern County in the south – covers 25 million acres and all or part of 22 counties. Comprising 25 percent of California's total land area, it is the largest conservancy region in the State. The jurisdiction includes the mountains and foothills of the Sierra Nevada range, the Mono Basin, Owens Valley, the Modoc Plateau, and a part of the southern Cascade Range, including the Pit River Watershed. The statute establishing the SNC divides the Region into six smaller Subregions.

The Sierra Nevada is an extraordinary resource of Regional, statewide, national, and even global significance. It is the state's principal watershed, supplying more than 60 percent of California's developed water supply. The Sierra sustains 60 percent of California's animal species and almost half of its plant species, including the world's largest living thing: General Sherman, a Giant Sequoia. In addition to providing water for the state, the Sierra supplies up to half of California's annual timber yield and

15 percent of the state's power needs, holding an untapped potential to increase its contribution to California's green energy portfolio. Its forests and agricultural lands are also uniquely suited to help reduce the warming impact of a changing climate by removing carbon dioxide from the atmosphere and storing it in tree trunks, branches, foliage, roots, and soils. The Sierra also hosts more than 50 million recreational visits per year and is home to more than 600,000 residents in 200+ local communities – communities that depend in large part on natural resources for economic sustainability, job creation, recreation, and to preserve the community character and viewsheds that are unique to the Sierra Nevada Region.

Governance

The SNC is governed by a 16-member Board with 13 voting members divided almost evenly between State-level appointments and local seats filled by members of County Boards of Supervisors in each of the SNC's six Subregions.

The members include:

- Secretary for Natural Resources Agency (or his/her designee)
- Director of Finance (or his/her designee)
- Three members of the public appointed by the Governor
- Two members of the public, one each appointed by the Speaker of the Assembly and the Senate Rules Committee
- Six county supervisors whose districts are within the Region, each representing one of the six Subregions
- Three non-voting liaison advisers: one each from the National Park Service, the U.S. Forest Service, and the Bureau of Land Management

Program Description

In accordance with the statute establishing the SNC, all of our activities are based on the principles of balance, cooperation, and equity. The statute requires that the SNC:

- Support efforts that advance environmental preservation and the economic and social well-being of Sierra residents in a complementary manner.
- Work in collaboration and cooperation with local governments and interested parties in carrying out the SNC's mission.
- Make every effort to ensure that, over time, SNC funding and other efforts are spread equitably across each of the various Subregions and among the program areas, with adequate allowance for the variability of costs associated with individual Subregions and types of projects.
- Inform and educate all Californians as to the substantial benefits they enjoy from the Region, and the importance of the environmental and economic well-being of the Region.

Program Areas

The SNC serves the Sierra Nevada Region by providing a focal point for action and helping to develop and promote a Regional identity for the Sierra as a whole. The SNC

does that, in part, by providing funding for local and Regional projects and offering technical and other assistance for collaborative efforts in cooperation with nonprofit, tribal, and government partners at all levels. The SNC's activities fall under seven legislatively mandated program areas, including:

- Increasing the opportunity for tourism and recreation in the Region
- Protecting, conserving and restoring the Region's physical, cultural, archaeological, historical, and living resources
- Aiding in the preservation of working landscapes
- Reducing the risk of natural disasters, such as wildfire
- Protecting and improving water and air quality
- Assisting the Regional economy through the operation of the SNC's program
- Enhancing public use and enjoyment of lands owned by the public

Current Funding Sources

The SNC's budget is made up of funds from three sources:

- The California Environmental License Plate Fund
- Proposition 84, The Safe Drinking Water, Water Quality and Supply, Flood Control, River and Coast Protection Bond Act of 2006 (Proposition 84). Proposition 84 allocated \$54 million in bond funds to the SNC. (Note: most of these funds have been expended.)
- Proposition 1, The Water Quality, Supply, and Infrastructure Improvement Bond Act of 2014 (Proposition 1). Proposition 1 allocated \$25 million in bond funds to the SNC.

Our Guiding Principles

The SNC is guided in its operations by a number of principles developed as part of the initial strategic planning process in 2006:

How We Operate

- The SNC conducts operations openly. Decision-making will be transparent, and SNC will always strive to improve communications throughout the Region.
- The SNC strives to maintain neutrality so all interested parties are provided an equal opportunity to participate in and benefit from the SNC's activities.

Our Key Objectives

- The SNC seeks to "add value" and build upon existing community and Regional efforts.
- The SNC brings a Regional focus to the issues of the Sierra Nevada, collecting and sharing information across the Region and communicating the benefits and contributions of the Region.
- The SNC encourages community-based solutions and will assist communities with technical expertise, information, and resources necessary to achieve local solutions.

- The SNC uses the best available information and science in making decisions, identifying opportunities to fill information and technical gaps, and building on and expanding community information.
- The SNC informs and educates the public throughout the Region and the state about the substantial benefits the Sierra Nevada provides to all Californians, including providing clean water for many uses outside the Sierra, and the importance of protecting and enhancing the environmental well-being of the Region.
- The SNC strives to identify and implement activities that result in integrated environmental, economic, and social benefits rather than “either or” outcomes.

Implementing Our Programs

- The SNC develops program priorities considering the input received through community outreach efforts and seeks to meet community needs.
- The SNC is flexible in implementing its programs, recognizing the need to act based on opportunity, available funding, local and Regional differences, and statewide interest.
- The SNC gives priority to multi-benefit projects and integrated activities (those that address more than one of the SNC’s program objectives).
- The SNC encourages projects and activities that leverage other organizations’ (government, private, and nonprofit) competencies and funding.
- The SNC evaluates projects considering what is occurring on surrounding lands, cognizant of potential impacts to those landscapes.
- The SNC purchases and/or creates incentives for the purchase, where practical, of resources for goods and services within the Sierra Nevada Region. We diligently seek opportunities to improve the economic well-being of communities in the Region.
- The SNC makes every effort to ensure that, over time, the SNC funding and other efforts are spread equitably across Subregions and program areas, with adequate allowance for the variability of costs associated with individual Subregions and types of projects.

Working with Others

- The SNC emphasizes cooperation with local governments and other governmental, tribal, and non-governmental partners in providing information, technical assistance, and financial support to assist in meeting mutual goals.
- The SNC coordinates and collaborates with all partners to achieve research, project funding, and program goals.
- The SNC convenes and facilitates interested parties to seek solutions for difficult problems to achieve environmental, economic, and social benefits.
- The SNC respects the mission, responsibilities, and obligations of other agencies and organizations.

STRATEGIC PLAN

Strategic Plan

Overview of Approach

In September 2011, the Board adopted a Strategic Plan which established objectives for the SNC within five areas of focus and laid out the strategies the organization would employ in meeting those objectives. The areas of focus included:

- Healthy Forests
- Preservation of Ranches and Agricultural Lands
- Watershed Protection and Restoration
- Promotion of Sustainable Tourism and Recreation
- Long-term Effectiveness of the SNC

In June 2014, the Board directed staff to refocus and increase efforts related to healthy forests in recognition of the dire conditions and urgent need for action in many of the forests in the Sierra Nevada. Per that direction, staff developed the Sierra Nevada Forest and Community Initiative (SNFCI) Action Plan, which was approved by the Board in September 2014. In addition, the Board approved the Watershed Improvement Program (WIP) at the March 2015 meeting, building upon the SNFCI Action Plan.

Development of this SAP was specifically intended to reflect the top priorities of the implementation of the WIP and the Proposition 1 Grant Program.

This Strategic Plan focuses planning efforts over the next three-and-a-half years and sets priorities for the SNC within the context of its broad mission, statutorily established program areas, Board direction, and a recent reduction in base funding. The plan will be implemented in ongoing collaboration with multiple partners throughout the Region. Its strategies will be carried out through specific actions identified in accompanying Action Plans, each of which will set forth a realistic set of actions for the SNC to accomplish in support of the priorities we have established through this planning process and available resources.

Programs

The SNC will focus on four programs during the life of this Strategic Plan, from January 2016 to June 2019. These programs:

- Are statutorily required and/or directed by the SNC Governing Board.
- Are associated with a workload that fits within current budgetary and staff resources.
- May include multiple subtopics.

The programs that will be the focus of SNC efforts under this plan are:

- Watershed Improvement Program
- Grant Program
- Abandoned Mine Lands
- Regional Recreation and Tourism

As mentioned earlier, the WIP and Grant Program are the organization's top priorities and resources will be allocated accordingly. The Abandoned Mine Lands and Regional Recreation and Tourism programs will continue to be focused efforts, but it is not anticipated that a significant amount of our resources will be used in these areas. The programs and any subtopics are described below, followed by strategies for each.

Watershed Improvement Program

Description

The Sierra Nevada Watershed Improvement Program (WIP) is a coordinated, integrated, collaborative program to restore the health of California's primary watershed through increased investment and needed policy changes. The WIP builds upon the broad consensus that more must be done to restore Sierra Nevada forests and watersheds. The pace and scale of science-based ecological restoration needs to dramatically increase in order to stem the tide of large, uncharacteristic wildfires and further degradation of these ecosystems. This comprehensive effort is being coordinated by the SNC and the U.S. Forest Service in close partnership with additional federal, state, and local agencies, and diverse stakeholders.

Activities under the WIP are organized under four primary focus areas:

Policy

Work within this area focuses on identifying and addressing state, federal, and local policy opportunities to increase the pace and scale of restoration, and improving the socio-economic well-being of Sierra communities, as well as identifying and addressing impediments to achieving these objectives.

Restoration Implementation

Work within this area focuses on identifying and quantifying the level and cost of restoration activity needed to restore Sierra Nevada watersheds to a state of proper functioning and resilience, providing the impetus for increased pace and scale of restoration.

Funding

Work within this area focuses on increasing and tracking state, federal, and local governmental and non-governmental investment in restoration activities, as well as securing investment from those who benefit from the Region, such as the urban, business, and agricultural communities who receive water from the Region.

Communication

Work within this area focuses on developing and utilizing a variety of communications tools and materials that support key WIP messages, and implementing outreach and communications strategies that engage key audiences, in order to support the goals of the WIP. These goals include:

- Utilizing local policy opportunities and addressing impediments to increase the pace and scale of restoration and improving the socio-economic well-being of Sierra communities.
- Identifying and quantifying the level of restoration activity, as well as the cost of implementation, needed to restore Sierra Nevada watersheds to a state of proper functioning and resilience.
- Increasing and tracking investment in restoration activities, as well as securing investment from those who benefit from the Region.

Statutory Goals Addressed

Primary

- Protect, conserve, and restore the Region's physical, cultural, archaeological, historical, and living resources.
- Reduce the risk of natural disasters, such as wildfires.
- Protect and improve water and air quality.
- Assist the Regional economy through the operation of the SNC's program.
- Aid in the preservation of working landscapes.

Secondary

- Provide increased opportunities for tourism and recreation.
- Enhance public use and enjoyment of lands owned by the public.

Strategies

Policy

- Utilize current, relevant science to inform and engage partners and key policy decision makers, and to impact policy and investment decisions at the state and federal levels in the following arenas (as a starting point):
 - Air quality, greenhouse gas emissions reductions, and carbon sequestration and storage
 - Forest restoration/management
 - Water quality and supply reliability
 - Habitat/biodiversity
- Work with partners to identify and complete necessary, relevant scientific research to inform activities under the WIP and to effect necessary policy modifications.
- Develop and maintain relationships with legislators, key decision-makers, state agencies, local governments, and partners in support of sound, science-based policy decisions that benefit the WIP and the Sierra Nevada Region.
- Actively participate in the development and implementation of state policy, and in administrative and planning processes that generate policy. Ensure that the WIP is a strategic component of the resulting plans, including (as a starting point):
 - Safeguarding California Climate Adaptation Plan/Assembly Bill 32 Scoping Plan Update

- Greenhouse Gas Reduction Fund Investment Plan Updates and Guidelines Development
- California Water Action Plan and Associated Implementation Plan
- State Wildlife Action Plan
- California Fire Plan
- Utilize the results of the WIP watershed-by-watershed analyses to identify policy opportunities that address local needs and issues.
- Identify and pursue policy opportunities that result in funding to benefit the WIP and the Sierra Nevada Region.

Restoration Implementation

Phase 1

- In close partnership with federal, state, and local agencies, and diverse stakeholders, identify and consolidate information in the WIP Regional Strategy describing the background conditions and recommendations for overarching regional needs in the issue areas of water reliability and quality, fire/forest health, greenhouse gas emissions reduction and long-term carbon sequestration/storage, and habitat/biodiversity. The Regional Strategy will help to engage a wide range of partners and serve as a basis for more localized efforts.
- Utilize local knowledge and partnerships to identify key data, stakeholders, plans, initiatives, collaborative efforts, restoration needs, and barriers to restoration that cover a range of watershed health issues.
- Maximize efficiency of project planning and implementation through a coordinated National Environmental Policy Act (NEPA) and California Environmental Quality Act (CEQA) compliance process.
- Work with the U.S. Forest Service, Bureau of Land Management, National Park Service, and other federal, state, and private landowners to assess restoration needs and costs required at the watershed level to achieve a state of resilience.

Phase 2

- Engage key partners in the WIP at the watershed level, including doing watershed-level and specific project planning needed for restoration on all lands. This strategy includes estimating project costs, with the goal of matching existing funding and identifying new project funding sources
- Cultivate new funding streams for restoration projects in the Sierra Nevada.
- Identify and act upon the policy areas impacting the increase of pace and scale of restoration in the watersheds of the Sierra Nevada for which we have a wider window of opportunity for influence.
- Work with partners to identify and develop an information hub where the most current Regional and watershed-level information can be found regarding key policy issues affecting the pace and scale of restoration of our watersheds; funding opportunities and existing investments in watershed health; partners and collaborative opportunities; and specific restoration projects in need of funding.

Funding

- Coordinate with other agencies to strategically fund projects under the WIP.
- Work with other agencies on grant guidelines to ensure regional resource needs and issues are addressed.
- Increase effectiveness of funding programs by addressing prerequisites such as CEQA/NEPA compliance.
- Provide user-friendly information about grant opportunities to WIP partners.
- Provide technical assistance to increase capacity of regional partners to apply for and administer grant funds.
- Track funding coming to the Region by types of funders, types of projects funded, and amounts leveraged or matched.
- Expand and secure funding from new sources to support the SNC and the programs of the WIP.

Communication

- Develop messaging and materials that:
 - Increase awareness among policymakers and the public about the important role the Sierra Nevada Region plays in California's overall economic, social, and environmental health and well-being.
 - Convey the risks the Sierra Nevada Region is currently facing, and explain the consequences of not restoring the Region to a state of resilience.
 - Support the needs identified by the funding, policy, and implementation goals of the WIP.
- Utilize the most effective tools to deliver our message, including both traditional and new media, to engage our target audiences.
- Engage key partners and establish a communications network that can maximize the communication efforts of the WIP through coordinated outreach.
- Utilize current events as opportunities to increase awareness among policymakers about the benefits provided by healthy Sierra forests and watersheds, and the actions needed to improve, maintain, and enhance those benefits.
- Increase participation in events, such as field tours and conferences, which support the overall goals of the WIP and engage new members of our target audience.

Grant Program

Description

Through funding from Proposition 84 and Proposition 1, the SNC's Grant Program allows the SNC to work directly with nonprofit, tribal, and governmental partners in the Region to grant funding for projects to improve water quality, reduce the risk of wildfire and other natural disasters, protect important natural resources and habitat, promote sustainable recreational use, improve resource management practices,

protect working farms and ranches, and address climate change impacts across the 22 counties comprising the SNC Region.

Proposition 84 Wrap-Up

The SNC's Proposition 84 Grant Program has been one of the primary tools used by the SNC to support the work of its partners across the Region. Since its first year of grantmaking in 2007, the SNC has authorized more than 300 individual grants totaling more than \$51 million. The SNC is wrapping up the Proposition 84 Grant Program and anticipates awarding the remaining funds in Fiscal Year 2015-16.

Proposition 1 Implementation

California voters passed Proposition 1, The Water Quality, Supply, and Infrastructure Improvement Bond Act of 2014, on November 4, 2014. Proposition 1 authorized the state to issue bonds for multi-benefit water quality, water supply, and watershed protection and restoration projects for the watersheds of the state, and the SNC was allocated \$25 million for this purpose. The SNC will deliver the first \$10 million to augment the WIP over Fiscal Years 2015-16 and 2016-17, with a focus on forest health projects that result in multiple watershed benefits.

Statutory Goals Addressed

Primary

- Protect, conserve, and restore the Region's physical, cultural, archaeological, historical, and living resources.
- Protect and improve water and air quality.
- Assist the Regional economy through the operation of the SNC's program.
- Reduce the risk of natural disasters, such as wildfire.

Secondary

- Provide increased opportunities for recreation and tourism.
- Enhance public use and enjoyment of lands owned by the public.
- Aid in the preservation of working landscapes.

Strategies

Proposition 84 Wrap-Up

- Allocate remaining Proposition 84 funding to Rim Fire restoration projects.
- Close out remaining projects.
- Implement grant process improvements as identified by the California Department of Finance during its regular agency audit.
- Evaluate the overall effect of the Proposition 84 Grant Program, quantifying the cumulative impact on the SNC Region.

Proposition 1 Implementation

- Support the WIP and state plans such as the California Water Action Plan by funding:
 - Fuel treatment projects that reduce wildfire risks, protect watersheds tributary to water storage facilities, and promote watershed health.
 - Projects that protect and restore rural and urban watershed health in order to improve watershed storage capacity, forest health, safety of life and property, and greenhouse gas reductions.
 - Watershed adaptation projects in order to reduce the impacts of climate change on California's communities and ecosystems.
- Maximize the impact of Proposition 1 funding by coordinating with other Proposition 1 funding agencies and leveraging other sources of funds in order to implement landscape-scale projects.

Abandoned Mine Lands

Description

The Abandoned Mine Lands (AML) program area concerns legacy impacts from abandoned mines within the Sierra Nevada Region. AML features continue to contribute heavy sediment loads and toxins such as mercury to Sierra Nevada waterways, threatening fish, water quality, and the capacity of local water supplies and downstream storage facilities. In addition, sediments and toxins originating from AML features within the Region continue to spread with the flow of water into the Sacramento–San Joaquin Delta and the San Francisco Bay.

SNC activities in this program area will support efforts to reduce the amount of sediments and toxins entering and moving through the Region's waterways, thereby reducing impacts to local and downstream fish populations, people, water supplies, and storage facilities. Strategies undertaken within this program area to remediate AML legacy impacts support the goals of the WIP through restoration and protection of soils, waterways, meadows, and habitat within the Region, benefiting overall forest health.

Statutory Goals Addressed

Primary

- Protect, conserve, and restore the Region's physical, cultural, archaeological, historical, and living resources.
- Protect and improve water and air quality.
- Enhance public use and enjoyment of lands owned by the public.

Secondary

- Provide increased opportunities for tourism and recreation.
- Assist the Regional economy through the operation of the SNC's program.

Strategies

- Facilitate protection of the Region's resources by assisting in the development of a California Natural Resources Agency policy reducing liability and monetary risks associated with acquisition of land impacted by AML.
- Contribute to the efforts of the California Abandoned Mine Land Agency Group, The Sierra Fund, the Delta Tributaries Mercury Council, and other partners to educate policymakers and identify and pursue AML remediation work.
- Explore funding opportunities and provide information and assistance regarding these opportunities to entities seeking to implement AML cleanup projects.

Regional Recreation and Tourism

Description

The tourism industry is one of the top two economic sectors for the majority of the Sierra Nevada's 22 counties. Outdoor recreation is a key driver of visitation, and also contributes to the overall quality of life for residents of the Region. SNC's Regional Recreation and Tourism Program will focus on positioning the Region as a top tourism destination by helping to develop sustainable outdoor recreation activities and authentic visitor experiences. This program will develop tools to help visitors and residents alike enjoy and protect the Region's natural and cultural resources while growing the economic vitality of the Region.

Statutory Goals Addressed

Primary

- Provide increased opportunities for tourism and recreation.
- Protect, conserve, and restore the Region's physical, cultural, archaeological, historical, and living resources.
- Aid in the preservation of working landscapes.
- Assist the Regional economy through the operation of the SNC's program.
- Enhance public use and enjoyment of lands owned by the public.

Secondary

- Reduce the risk of natural disasters, such as wildfires.
- Protect and improve water and air quality.

Strategies

- Forge strategic partnerships among Regional recreation interest groups and communities to identify opportunities for the development and implementation of sustainable recreation infrastructure and experiences such as trails, facilities, and enhanced interpretive and educational projects.
- Build upon efforts like those of the Eastern Sierra Recreation Collaborative to facilitate collaborative processes that develop sustainable recreation strategies among gateway communities and land management agencies in order to meet the recreation demands in the Region.

- Continue a level of support for the Sierra Nevada Geotourism Project to help promote the Region's cultural and heritage resources.
- Build local and Regional capacity through researching and identifying increased funding opportunities to support sustainable recreation and tourism development throughout the Sierra Nevada.
- Support ongoing training, education, and promotion efforts to develop additional agritourism producers in the Region.

Ongoing Activities

Under the previous Strategic Plan, the SNC initiated a number of activities that are still underway. Work will continue on these activities under this Strategic Plan as well, and resources are appropriately allocated to carry out these functions:

- Sierra Climate Adaptation and Mitigation Partnership – Sierra Business Council
- Resilient Lands and Waters: California Headwaters Program
- National Disaster Resilience Competition
- Sierra Nevada Forest and Community Initiative Coordinating Council
- Pacific Forest and Watershed Lands Stewardship Council
- Great Sierra River Cleanup

Long-Term Effectiveness of the SNC

In addition, the SNC plans to engage in the following activities related to enhancing its long-term effectiveness:

- Actively pursue new and enhanced funding streams in support of the SNC, including existing and potential opportunities.
- Work with better-funded state agencies to bring a higher proportion of State funding to support projects in the Sierra.
- Investigate potential fee-for-service opportunities with other organizations, or other potential new sources of income.
- Improve the SNC's visibility and publicize our work with decision-makers and the public to improve knowledge of our program successes and our mission.

Rapid-Response Projects

The SNC periodically undertakes quick-turnaround projects in response to opportunities to further our mission. Examples of these might be compiling research, or developing story maps or fact sheets that are especially timely. Due to the nature of these opportunities, we have termed them rapid-response projects and anticipate doing more of them as the need arises. Any such projects would be consistent with our adopted programs and strategies.

ACTION PLAN

(to be developed after September 2015 Board meeting)

Agenda Item VIII Strategic Plan

Presented by:
Angela Avery

Sorensen's Meeting

Planning for the Future

In August 2014, SNC staff met with Board Chair Kirwan and Boardmember Brissenden to consider SNC successes and failures with the goal of setting clear direction for the future.

SNC Successes

What worked?

- Awarded over \$51 million in Proposition 84 grants
- Helped establish a Sierra Nevada Regional identity
- Carried out initiatives to bring attention to important Regional issues
- Changed thinking of Sierra Nevada locally-elected leaders about the value of the SNC and the kind of work the Region needs to be healthy
- Made smart investments to support and build capacity within the Region
- Established a positive reputation within the Region by creating an entrepreneurial organizational culture unlike other state agencies

SNC Challenges

What didn't work as well as we hoped?

- Maintaining an equitable balance between mission, programs and geography
- Keeping the coalition that helped create the SNC engaged
- Communicating with decision-makers about Regional needs and return for investment
- Breaking down Regional silos to establish a strong coalition and Sierra Voice

Proposed Programs

The SNC will plan to continue our work by focusing on four primary programs between January 2016 – June 2019.

These programs are:

- Watershed Improvement Program (WIP)
- Grant Program
- Abandoned Mine Lands
- Recreation and Tourism

Board and Public Input

- Are the four proposed programs the proper areas of focus for the SNC between January 2016 – June 2019?
- Are the strategies identified for the four proposed programs appropriate?

Next Steps

- Edit Strategic Plan based on Board and public feedback
- Develop Action Plans to support each Program
- Analyze discretionary spending and staff deployment
- Bring draft Strategic Action Plan for Board approval
Dec. 2015
- Implement approved Strategic Action Plan Jan. 2016

Background

For more than six years, the Sierra Nevada Conservancy (SNC) has been actively involved in issues relating to forest and community health. The Sierra Nevada Forest and Community Initiative (SNFCI) was adopted by the Board in 2011 and was endorsed by all 22 Sierra counties, as well as numerous other groups and organizations. It called for parties to work together in a collaborative manner with the objectives of restoring forests to ecological health and improving local communities' social and economic well-being. The SNFCI Regional Coordinating Council (Coordinating Council) continues to represent a wide range of diverse perspectives including local government, environmental and conservation organizations, the wood products industry, fire safe councils, community organizations, recreational groups, and public land management agencies. They are unified by the common goals of increasing the pace and scale of restoration of the Sierra Nevada's forests and building healthier ecosystems, economies and communities in the Sierra Nevada. The various forest collaboratives on the ground are also continuing their work to carry out this same mission on the ground in specific watersheds and communities.

At the June 2014 Board meeting, the Board directed SNC staff to develop a plan that ensures that the issues being addressed under SNFCI were the organization's top priority. In response to this direction, the [State of Sierra Nevada's Forests Report](#), which represents our best understanding of current forest conditions and potential consequences at this time, was developed by staff, and approved by the Board at the September 2014 Board meeting.

Recognizing that a more holistic approach to watershed health in the Sierra was needed, SNC staff worked closely with U.S. Forest Service (USFS) Region 5 in the development of the Sierra Nevada Watershed Improvement Program (WIP). The WIP is a coordinated, integrated, collaborative program to restore the health of California's primary watershed through increased investment and needed policy changes, including the actions identified in the SNFCI Action Plan and expanding upon them to include a variety of other watershed health issues. The WIP was officially launched in March of this year, with the Board approving a [Plan](#) to guide development of the WIP. The USFS also co-hosted the March 4 Summit with the SNC, which was a critical step in engaging our key partners in the WIP. They have been fully engaged in developing this plan, and have indicated that all of the National Forests in the Sierra Nevada will be active participants in the WIP.

The WIP will enhance and build upon our ongoing efforts to restore Sierra watersheds and forests to ecological health. By identifying and quantifying the need for, and cost of, restoration at the watershed level, as well as the impediments to taking such action, we will create a clearer roadmap for moving forward. Engaging other state and federal agencies who support restoration activities will ensure a more strategic and effective approach. The program will also provide critical information for policy makers and "downstream beneficiaries" to consider their role in this restoration effort. At the same time, building on existing collaborative efforts ensures that key interested parties are

engaged in the assessment process and in project development and implementation, and that ongoing efforts will be enhanced.

Current Status

Since the June board meeting, SNC staff has been focused on developing the partner relationships required to implement the WIP, and developing the template for approaching implementation of the WIP at the watershed level in lands across a variety of ownership. Staff has been building on the momentum and interest generated at the March Summit with follow up conversations and meeting with our participants to identify opportunities to leverage our efforts to further our shared objectives under the WIP. Staff also continues to engage new partners in this effort, many of whom are approaching us asking for ways to support the WIP after participating in the Summit, or reading about it through one of the many news outlets that ran the story. Boardmembers Kirkwood and Giacomini continue to serve as the Board committee providing oversight and guidance for the effort.

In late June, staff worked with the U.S. Forest Service and California Natural Resources Agency to have a portion of the Sierra Nevada Region included in [the designation of the California Headwaters as a Resilient Lands and Waters Region](#). President Obama's Priority Agenda for Enhancing the Climate Resilience of America's Natural Resources (released in October 2014) called for the identification of place-based, landscape-scale resilience strategies. While this designation didn't result in new funding for the Region, it did shine a light on the importance of the Sierra to California, and supported the work we strive to accomplish through the WIP. These two efforts will be closely coordinated, as the regional planning work occurring through the WIP will feed into the report required by the Resilient Lands and Waters designation which will identify an initial list of priority areas for conservation, restoration, or other investments, to build resilience in vulnerable regions, enhance carbon storage capacity, and support management needs. Additional information on the CA Headwaters Region and the Resilient Lands & Waters Initiative can be found in the Regional Policy and Outreach Report.

Here are some of the key outcomes of the WIP over the last three months:

WIP Regional Strategy Development

- While the SNC has delved deeply into the forest health issues aspects of the WIP, the scope of this effort is much larger, covering a wide array of watershed health concerns. Staff is currently engaging our partners in identifying and describing these other aspects of the WIP through the development of the WIP Regional Strategy.
- The Regional Strategy will identify and incorporate key objectives from various State plans, policies, etc., such as the CA Water Action Plan, Safeguarding CA, and the CA Wildlife Action Plan.
- The WIP Regional Strategy will include key information, trends, and data for each major category, which will include Water, Fire, Habitat/Biodiversity, GHG/Carbon

Sequestration, and Recreation/Tourism. There will also be common threads throughout all categories, such as strategies to build climate change resilience.

- The WIP Regional Strategy will also describe in detail the process and timeline through which the WIP will be implemented at the watershed level. (More details about this can be found in the Restoration Implementation section later in this report.)
- Staff anticipates having a draft version of the Strategy completed by the end of September 2015, and a final draft by our December 2015 SNC board meeting.

Policy

- The SNFCI Regional Coordinating Council is planning a special field-based meeting in October to focus on identifying new models for overcoming the challenge of the lack of wood processing infrastructure in the Sierra Nevada. This meeting will include a wider group of people working to address this issue across a wide variety of approaches.
- Staff and partners are engaging in the process of updating the three-year Cap and Trade auction revenue investment plan. An initial draft was released in late July, with plans for the plan to be completed in late fall.
- Staff continues to be active participants in the Forest Climate Action Team. This group is charged with identifying a better understanding of the role forests play in assisting in efforts to address climate change and determine the best strategies to pursue in that regard.
- SNC Staff and representatives from USFS Region 5 met with Secretary John Laird and California Natural Resources Agency (CNRA) staff in July, resulting in a potential Memorandum of Understanding (MOU) formalizing the relationship between CNRA and USFS Region 5 and their support of and roles in the WIP.
- In July, SNC Staff and representatives from USFS Region 5 also met with CAL FIRE to discuss the issues associated with the implementation of the Greenhouse Gas Reduction Funds (GGRF) grant program.
- The same group also met with the California Air Resources Board and CalEPA, to discuss a variety of climate related issues. There will continue to be efforts to better understand the role forests play in storing carbon, the effects of a variety of forest health activities and the consequences of large, damaging fires.
- SNC staff also identified policy action targets and objectives for the WIP, which are now being honed and finalized for inclusion in the WIP Regional Strategy and the SNC Strategic Plan.

Funding

The WIP Funding Team has made progress towards a number of WIP objectives, including:

- Launching the SNC Proposition 1 Grant program.

- Developing and starting to use a funding investment tracking tool for the Region. Funding Team members have been researching and recording data in the tool to track WIP-related investments in the Sierra Nevada Region from federal, state, local, and nonprofit sources.
- Publishing several Funding Research Memos to SNC website providing valuable information about current funding opportunities.
- Publishing and sharing a monthly newsletter with partners highlighting funding opportunities.
- Convening meetings and facilitating introductions between regional partners and potential funders.
- Providing technical assistance to regional partners in developing grant applications to multiple sources.
- Completing a draft concept paper to help guide activities during the next 18 months, which will be integrated into the WIP Regional Strategy and the SNC Strategic Plan.

Communications

- The WIP Communications Team worked to finalize a communications strategy for the WIP, identifying opportunities to coordinate outreach with partners and possible products that could be used to connect with policy makers.
- SNC and the USFS also developed a joint “virtual billboard” campaign on social media that focused on the importance of increasing the pace and scale of restoration in the Sierra Nevada. This campaign provided viewers with two comparison photos – one depicting the desired look of Sierra forests and watersheds, and the other showing Sierra forests and watersheds after large, damaging fire events. The caption “You Choose” was included on all billboards to indicate that we have the ability to alter the current trends. (These virtual billboards will be shown as part of the Regional Policy and Outreach portion of the board meeting.)
- A logo was developed for the WIP and work to brand the WIP has started. (This will be shown as part of the Regional Policy and Outreach portion of the SNC Board meeting).

Restoration Implementation

- The SNC is coordinating with USFS Region 5 and the Tahoe National Forest, who are making final refinements to the watershed assessment approach at the forest level, which will eventually be rolled out on the USFS lands throughout the Region. There is agreement between the SNC and the USFS that these watershed assessments must be closely coordinated with the forest plan revision process, to ensure adequate capacity, as well as utility, at the forest level.
- The BLM’s Mother Lode Field Office is currently developing a pilot assessment on their lands, which will complement the assessment that has been done on the

Tahoe National Forest. A template will be developed based on this pilot that will then be developed by the other BLM field offices throughout the Sierra Nevada Region as part of the WIP. SNC is also in conversation with National Park Service leadership in order to determine the best ways to engage them in the WIP as well.

- The Placer Resource Conservation District, through the Sierra Coordinated Resources Management Council (SCRMC) Joint Powers Authority (JPA), has begun work on the pilot data collection process at the watershed level in the area overlapping the Tahoe National Forest and BLM Mother Lode Field Office assessments, which will give us a well-rounded view of this watershed area. Once the JPA data collection process has been grounded through this pilot (end of September 2015), this data assessment work will be launched throughout the Sierra Nevada. We anticipate this first phase of the watershed level assessment being completed by the end of this year.
- The National Fish and Wildlife Foundation (NFWF), USFS Region 5, and SNC are also exploring the possibility of a detailed watershed level analysis, including project identification, on a watershed in the Tahoe National Forest, which if successful could attract new streams of funding to that watershed.

Next Steps

Staff will continue further development and implementation of the WIP, focusing efforts on the four key areas of Policy, Funding, Communications, and Restoration Implementation. Efforts continue to deepen on the forest/fire/community issues, but through the development of the WIP Regional Strategy, we are now engaging our partners in developing a more comprehensive approach to watershed health to ensure that aquatic, meadow, habitat, and recreational resources are protected and restored.

Staff is also working with USFS Region 5 to present a WIP Partner Briefing Webinar in early October. Staff will be working with key partners to identify new potential partners to engage with the WIP. The webinar will include an overview of the WIP, a high-level review of the WIP Regional Strategy, and opportunities through which interested parties can engage with the WIP, at both the Regional and watershed levels.

Staff will provide regular updates to the Board as to progress in the development and implementation of the WIP.

Recommendation

This is an informational item only; no formal action is needed by the Board at this time, although Boardmembers are encouraged to share their thoughts and comments.

Background

In an on-going effort to identify and share science relevant to the Sierra Nevada Region and the Watershed Improvement Program (WIP), Sierra Nevada Conservancy (SNC) staff has been tracking, monitoring, and reporting on relevant research, studies, and reports with potential implications for WIP-policy activity.

Current Status

Historically, forest ecosystem services produced in the Sierra Nevada – water, carbon, and air – have been generally been taken for granted in the policy arena. Today, unhealthy conditions, drought, and climate change are stressing forest ecosystems and those ecosystem services are instead contributing to our environmental problems. As a result, there is a growing recognition of the need to actively manage Sierra Nevada ecosystems not only to ensure continued availability of the services, but to reduce environmental impacts from degraded systems.

Below is a summary of some key research results that can help inform ongoing policy discussions.

Policy Background: Air Quality – Greenhouse Gasses (GHGs)

According to existing laws, prescribed and managed fires are counted by regional Air Boards and the federal EPA as contributors to air pollution and are therefore subject to regulation and penalties. Wildfires that are actively under suppression are not counted. Wildfires typically burn in the late summer when air quality conditions can be already poor and therefore wildfire emissions can compound air quality problems. The result can lead to unhealthy air quality days for local and regional populations, which are then erased from the official air quality records despite the impacts that these fires can have on public health.

New data suggests that all smoke is not equal. Not only can the timing of prescribed and managed fires be scheduled to avoid times when air quality is already bad, but the research below describes how, on a per-acre-burned basis, prescribed and managed fires may release much less carbon and GHGs than an out-of-control wildfire burning at high severity. The subsequent article describes health implications as they relate to particulate matter emissions. The implication is that using prescribed and managed fires during appropriate times can mitigate future emissions of GHGs and particulate matter from forest fires. SNC partner and collaborator [Sierra Forest Legacy has a webpage dedicated to this issue if you would like to learn more.](#)

Relevant Research

[Impacts of Fire Management on Aboveground Tree Carbon Stocks in Yosemite and Sequoia & Kings Canyon National Parks](#)

By John Matchett, James Lutz, et al. – 2014 – National Park Service

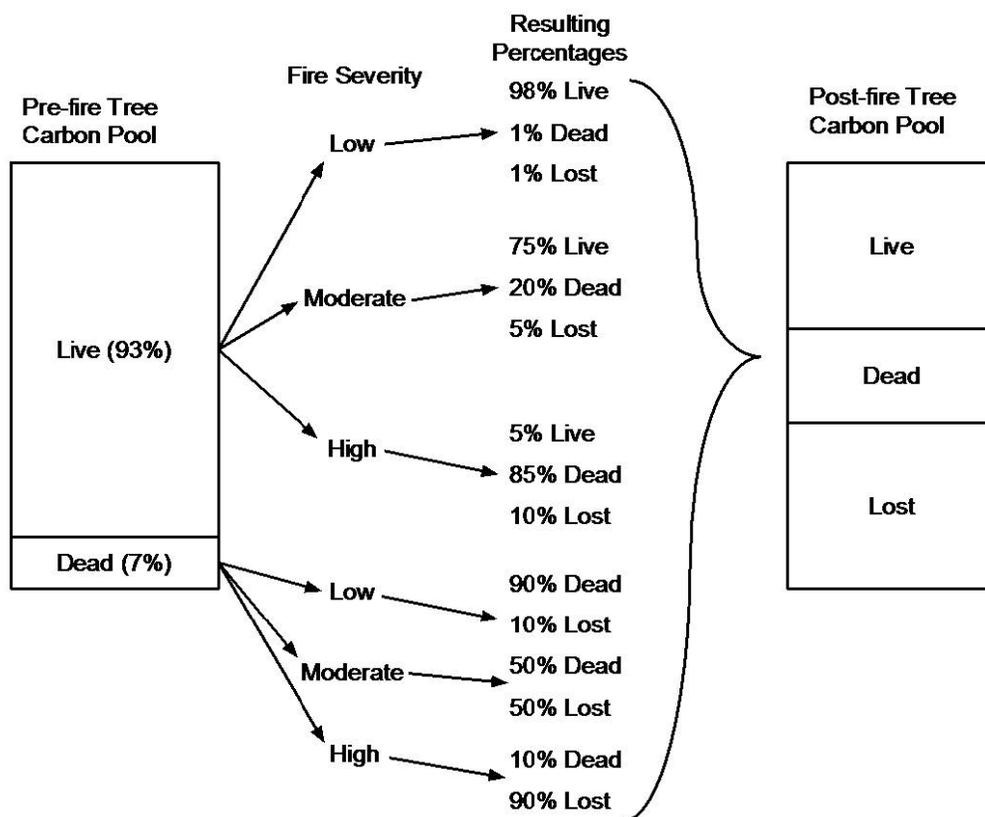
The authors performed an intensive analysis on carbon stocks in southern Sierra Nevada National Park forests and examined how recent fires may have impacted those carbon stocks. One critical distinction the authors note between their study area and forests

elsewhere in the Sierra Nevada is that the forests they analyzed have an extensive fire history and as a result recent fires have predominately been of low- or moderate-intensity. As a result, with the exception of red fir forests, they did not find that low to moderate fires significantly affected carbon levels on most of the forests they studied.

The authors developed Figure 1 below to show how carbon in forests can be impacted by different severities of fire and why the carbon stocks in their study forests showed little impact from low- and moderate-severity fires, especially the live trees. Interestingly, even though the high-severity fire kills 95 percent of the live trees, only 10 percent of live-tree carbon is actually emitted in the fire event itself (“Lost”), leaving 85 percent of that carbon now in the dead pool. This is because regardless of how severe a fire is, fires emit carbon from consumed leaves, needles, branches, and dead material and will not have any significant immediate impact on the carbon stored in tree trunks. Typically a low- or moderate-severity fire will not affect the carbon stored in canopy branches and leaves, but a high-severity fire would. While a high-severity fire will not immediately lead to emissions from the carbon stored in the tree trunks, the fire kills the tree and puts that carbon at risk. Once a tree dies, it slowly decays and its carbon is released to both the soil and the atmosphere. Therefore, the severity of the fire has a direct impact on the quantity of both immediate and long-term releases of GHGs from the burned area.

Based on the figure below, immediate event emissions from a low-severity fire represent only about two percent of the total carbon on the landscape and results in almost no additional dead trees. This is in stark contrast to high-severity fire, which leads to the emission of about 15 percent of a forest’s carbon during the wildfire event and an additional 85 percent of the live carbon pool now dead and decaying. Given the quantities of carbon stored in the forest landscape and the scale of recent megafires, the 15 percent emitted to the atmosphere adds up to hard-to-comprehend amounts. The authors state *the immediate emissions from large wildfires can approach magnitudes equivalent to total annual emissions from medium to large cities, leading to the perception that such fires are significant threats to landscape carbon sequestration capacity. Even though this view only accounts for immediate and short-term fire effects, it still leads to the possibility that using fire as a management tool may be significantly limited if regulations restricting wildfire carbon emissions are implemented. However, if limitations on fire use result in further accumulation of surface and ladder fuels that increase the potential for high-severity fire and thus unstable carbon stocks, such regulations may be counterproductive for long-term carbon management.*

Figure 1



MATCHETT, LUTZ, ET AL. – 2015

Policy Background: Air Quality – Particulate Matter 2.5 (PM2.5)

When fire burns through a forest, it consumes organic matter and releases smoke to the atmosphere. [According to the EPA](#), smoke is composed primarily of carbon dioxide, water vapor, carbon monoxide, particulate matter (PM), hydrocarbons and other organic chemicals, nitrogen oxides, trace minerals and several thousand other compounds. [Particulate Matter 2.5](#) (PM2.5) is a focus of current policy discussions, including its impact on public health and as a greenhouse gas. The California Air Resources Board (CARB) has recently released for public review and comment a concept paper for a [Short-Lived Climate Pollutant Reduction Strategy](#). CARB defines a Short-Lived Climate Pollutant as methane, black carbon (PM2.5), fluorinated gasses, and tropospheric ozone. [According to CARB](#), broad action to reduce short-lived climate pollutants can cut global warming in half by 2050 and save an estimated 2.4 million lives annually, by 2030. They continue, black carbon warms the atmosphere by absorbing solar radiation, influences cloud formation, and darkens the surface of snow and ice, which accelerates heat absorption and melting. CARB's 2012 Black Carbon Emission Inventory found that 52 percent of California's black carbon emissions come from wildfire (does not include

agricultural burning). In 2013, 66 percent came from wildfire, which, while not explicitly stated, likely demonstrates the impacts of events such as the Rim Fire. The concept paper identifies the need to *prioritize areas where the use of prescribed fire will have the greatest reduction in wildfire risk, and associated net back carbon impacts.*

Relevant Research

[Wildland Fire Management and Air Quality in the southern Sierra Nevada: Using the Lion Fire as a case study with a multi-year perspective on PM2.5 Impacts and Fire Policy](#)

By: Don Schweizer and Ricardo Cisneros – 2014

Research conducted by Schweizer and Cisneros demonstrates how managed and prescribed fire can not only reduce fire-related health impacts to area populations compared to megafires, but that prescribed/managed fires likely release less black carbon per acre burned (as described in the previous article). *In addition to fire size, fuel loading, fire intensity, and fuel consumption at a minimum need to be understood to accurately assess emissions.*

Comparing the managed Lion Fire of 2011 to the wildfire [McNally Fire of 2002](#), the Lion Fire had little to no effect on the regional air quality while the McNally Fire had significant impacts due to the size of the area burned each day, the amount of fuel burning, and that it occurred during a time when air quality in the area was already an issue. Based on their findings the authors warn that *the backlog of fuels created through years of fire suppression has likely created an emissions deficit that will be confronted in the near future by an increasing population.* However, their findings suggest that *management of naturally occurring fires during advantageous meteorological and ecological conditions should be prioritized to limit future air quality impacts.* Because managed/prescribed fires occur at times when overall air quality is relatively good, their acres burned per day are relatively small, and their typically low-to-moderate intensity consumes less fuel as demonstrated by Matchett et al., there is *the potential for mitigating future impacts from a larger more intense fire using managed fire.* These two studies demonstrate how prescribed and managed fires can be used to mitigate two of CARB's primary concerns: reducing black carbon emissions from California's largest emission source (wildfire) and reducing regional health impacts from PM2.5.

Policy Background: Water Quantity and Forest Management GHGs

In our fourth year of drought, Proposition 1 Water Bond projects are beginning to get underway in an attempt to create more resilient water storage to buffer CA inhabitants against future drought. At the same time, Greenhouse Gas Reduction Fund (GGRF) projects are being developed to reduce emissions, and sequester and secure carbon from the atmosphere. Better understanding the various benefits resulting from healthy forests, regardless of funding source, will inform decisions regarding the investment of these funds. The summary below describes a recent effort looking at these issues.

Relevant Research

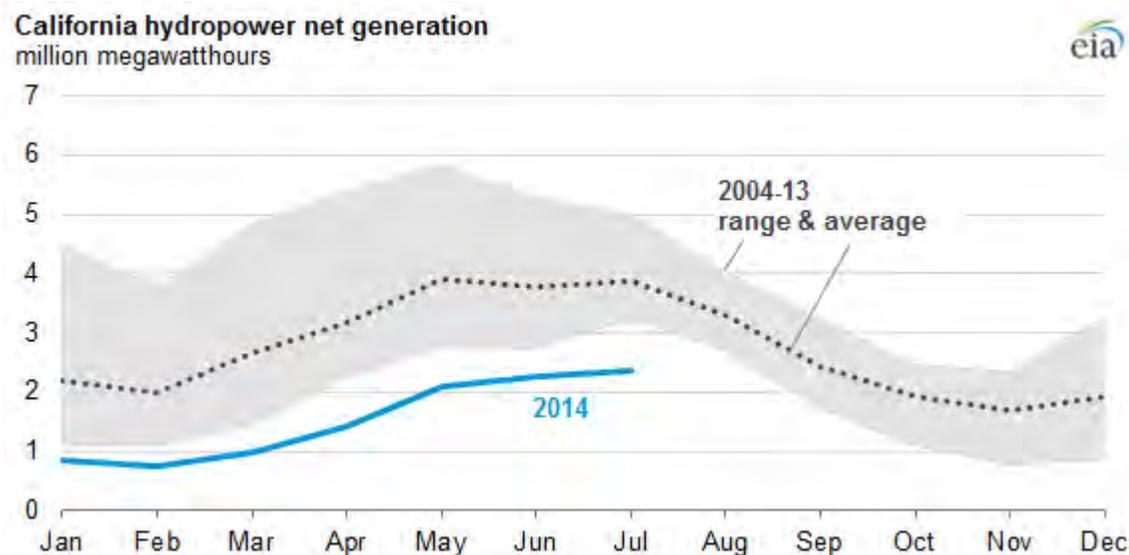
[Estimating the Water Supply Benefits from Forest Restoration in the Northern Sierra Nevada](#)

By: Kristen Podolak, David Edelson, et al. – 2015 – The Nature Conservancy

The paper by Podolak et al. suggests that fuel reduction treatments could both increase available water as well as reduce greenhouse gas emissions. In many small-scale studies, selective removal of trees has led to an increase in the water yield from that watershed. The authors used the results of those studies and applied them to potential ecological restoration treatment activities in the north central watersheds of the Sierra Nevada (Battle Creek to Mokelumne River). The treatment activities were drawn from USFS data on current and potential project areas. Rather than focusing on maximizing potential water yield, the authors instead focused on treatment activities that would restore the ecological function of the forests and would increase resiliency against high-severity fire, with water yield as a side benefit that may help to pay for the treatment activities. The authors used the USFS treatable acres data to calculate the acreage necessary to reach the 20-30 percent of the landscape treated necessary to reduce overall fire threat within a watershed.

Based on their assumptions, the authors theorize an upper end of a six percent increase in water yield from their study watersheds, which in the case of the Feather River watershed would equate to an additional 285,000 acre feet of water available for downstream water use. Note that an acre foot of water provides enough water to meet the needs of approximately 10 people per year, so the potential increase in the Feather River watershed water supply could provide water to over two million Californians in a year. The authors conclude that for watersheds with existing hydropower facilities the cost of the forest restoration activities can almost be entirely paid for by the revenue from the power generated from the additional water. The authors did not extrapolate out their findings to the current drought conditions or to greenhouse gas emissions, but [the drought led to roughly a 50 percent decline in hydropower production in the state from 2011 - 2014](#) (see Figure 2 below). The resulting energy deficit was in part filled by natural gas energy, which therefore increased California's emissions of GHGs. While observational research on the impact of treatments on water yield are still gathering data, the TNC study demonstrates the significant potential benefits that reducing the fire risk in the Sierra Nevada will have on seemingly unconnected ecosystem services – water and energy production.

Figure 2



U.S. ENERGY INFORMATION ADMINISTRATION

Next Steps

Staff will continue to track, monitor, and report on important scientific developments as they occur. Specific attention will be paid to opportunities to provide input on partner agency efforts including:

- Air Resources Board [draft](#) short-lived climate change pollutant strategy and their strategies to achieve the greenhouse gas reduction goals by 2030 set forth by Governor Brown; and
- CAL FIRE/FRAP grant guidelines for projects funded through the Greenhouse Gas Reduction Fund and how forest treatments are counted towards carbon sequestration and storage is still under development.

Recommendation

This is an informational item only; no formal action is needed by the Board at this time, although Boardmembers are encouraged to share their thoughts and comments.

Agenda Item X

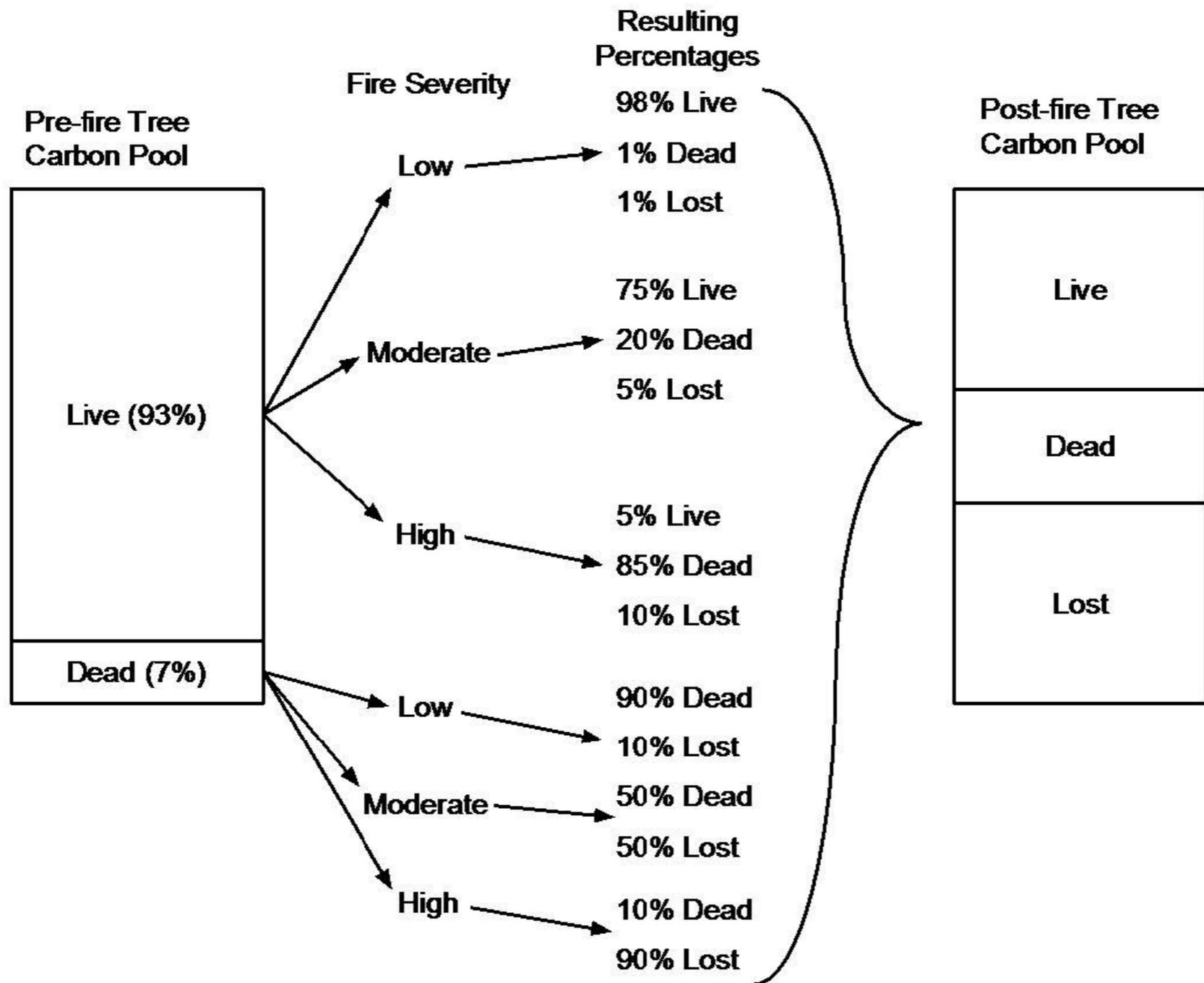
Policy- Related Science and Research Overview

Presented by:
Nic Enstice

Sierra Nevada: Carbon, Water, and Air



Carbon and Fire



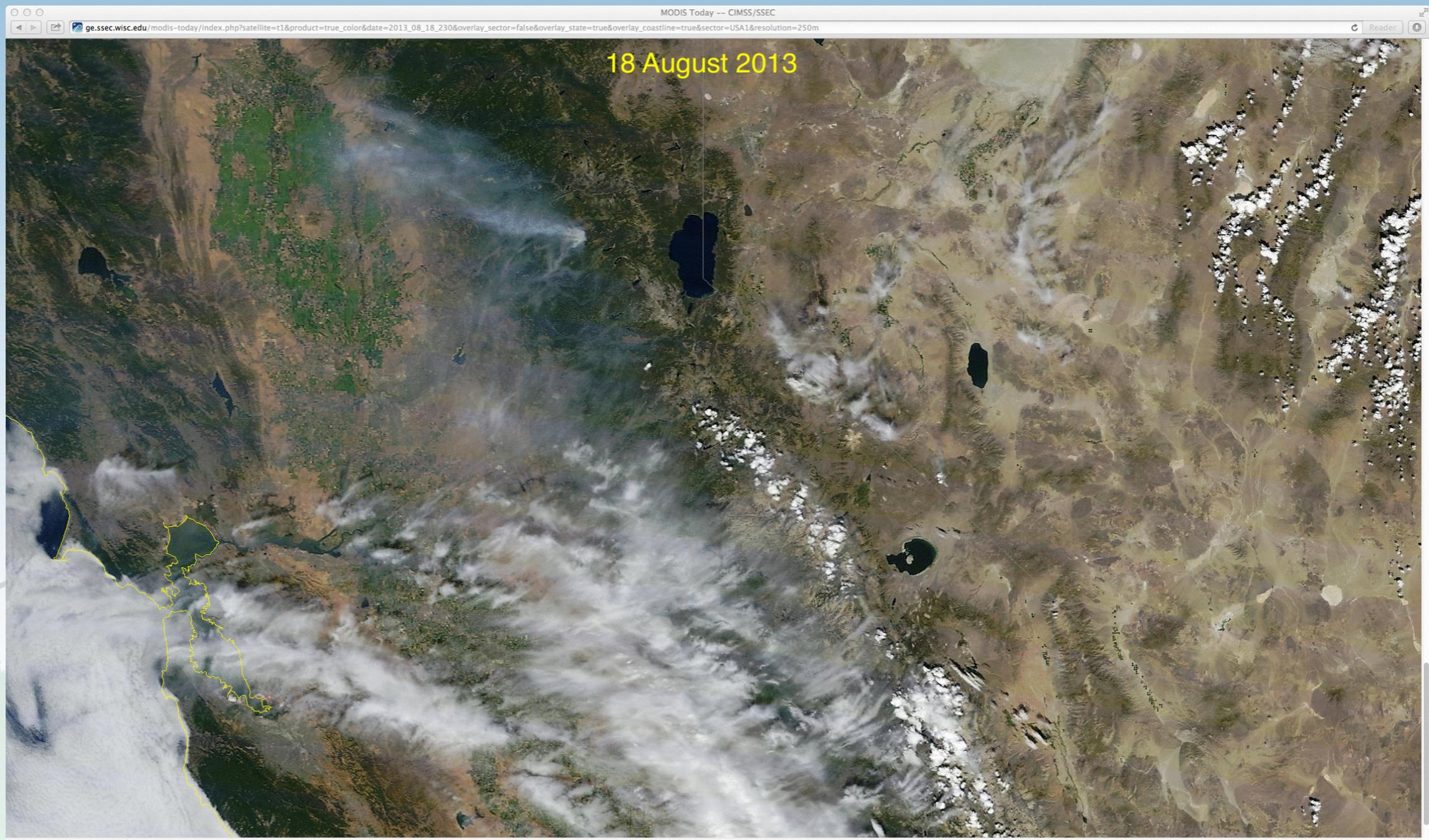
Carbon and Low Intensity Fire



Carbon and High Intensity Fire



Rim Fire Emissions – Aug 18 – 30, 2013



Current Fire Emissions

<http://viewer.smoke.airfire.org/run/standard/CANSAC-2km/2015072700/>

FOREST SERVICE U.S. DEPARTMENT OF AGRICULTURE R&D BlueSky Daily Runs* (beta)

Select Runs View Options

CAN/NV 2km 72hrs BlueSky Daily Run initialized at 2015-07-27 00Z and run for 71hours

7/27/2015 0:00 Pacific Daylight Savings speed

PM 2.5

- HOURLY 1RedColorBar
- 3-HR RUNNING 1RedColorBar
- DAILY MAXIMUM 1RedColorBar
- DAILY AVERAGE 1RedColorBar

1 5 10 20 40 90 140 350 525 $PM_{2.5}$ [$\mu g/m^3$]

*Experimental Research Output. Use at your own Risk.

Fire Information

- MODELLED FIRES

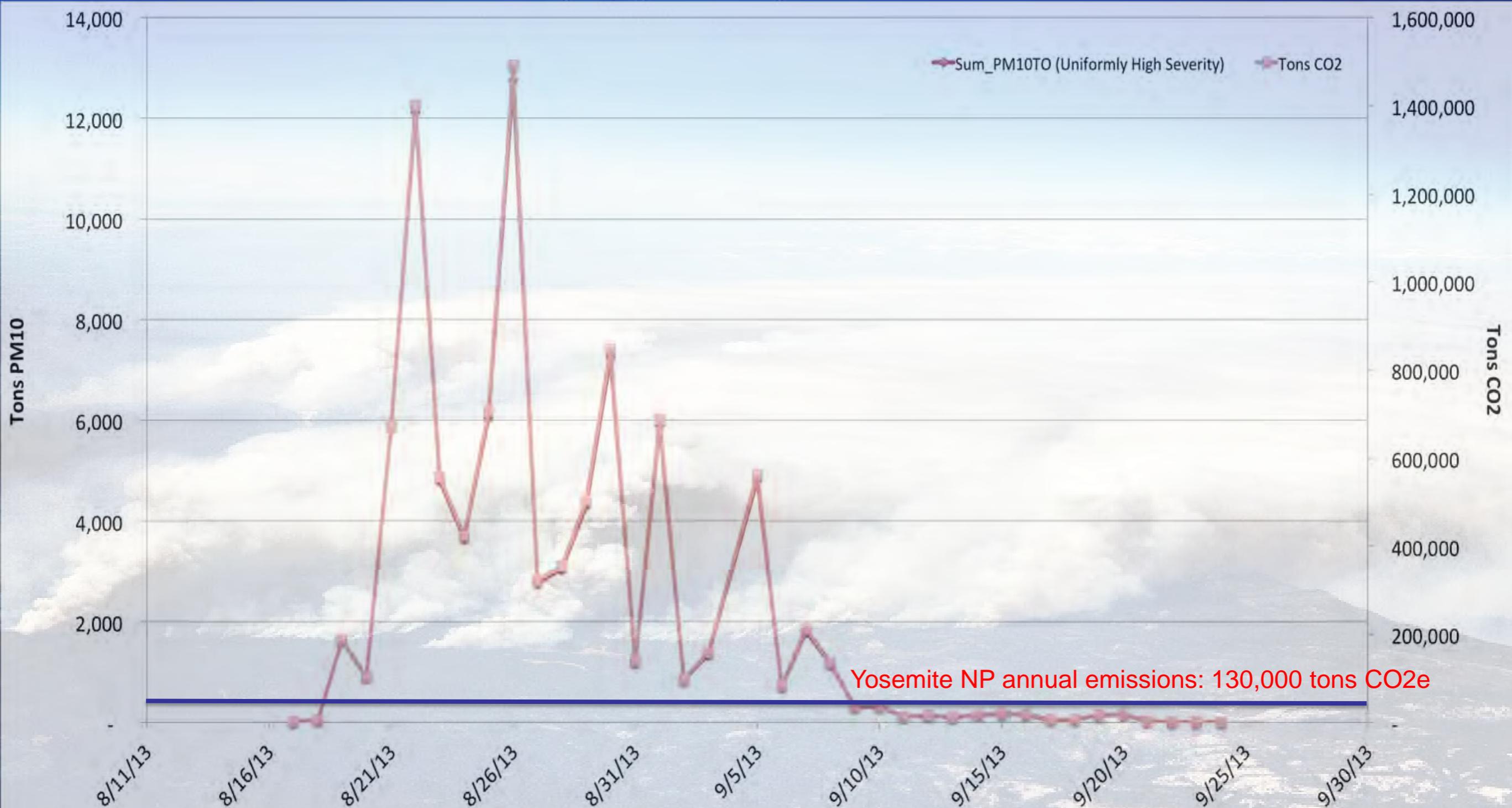
Other

- REGION BOUNDS

Share This Run

Map showing fire emissions over California and Nevada. Key locations include Redding, Reno, Sacramento, San Francisco, San Jose, Fresno, Los Angeles, San Diego, and Tijuana. The Humboldt-Toiyabe National Forest is also labeled. The map includes a compass, a person icon, and zoom controls.

Daily GHG emissions from the Rim Fire



Yosemite NP annual emissions: 130,000 tons CO2e

CARB: Short-lived Climate Pollutants

Short-lived climate pollutants are powerful climate forcers that remain in the atmosphere for a much shorter period of time than longer-lived climate pollutants, such as carbon dioxide (CO₂). Their relative potency, when measured in terms of how they heat the atmosphere, can be tens, hundreds, or even thousands of times greater than that of CO₂. Reducing these emissions can make an immediate beneficial impact on climate change.

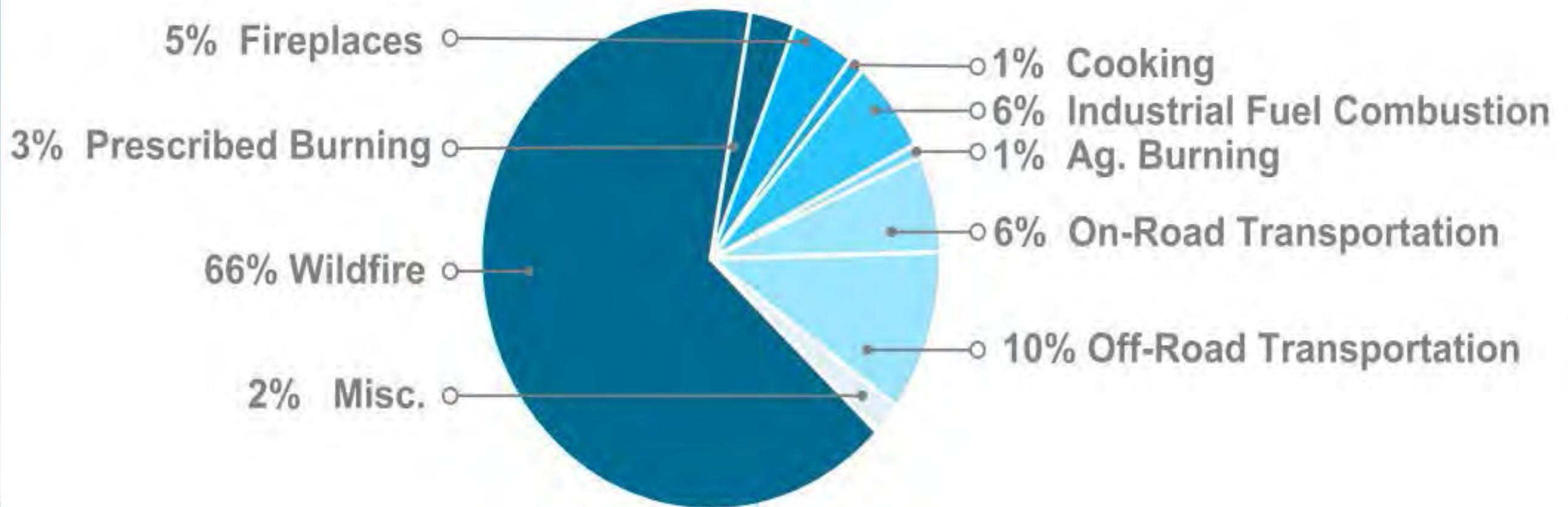
CARB: Short-lived Climate Pollutants

Short-Lived Climate Pollutants

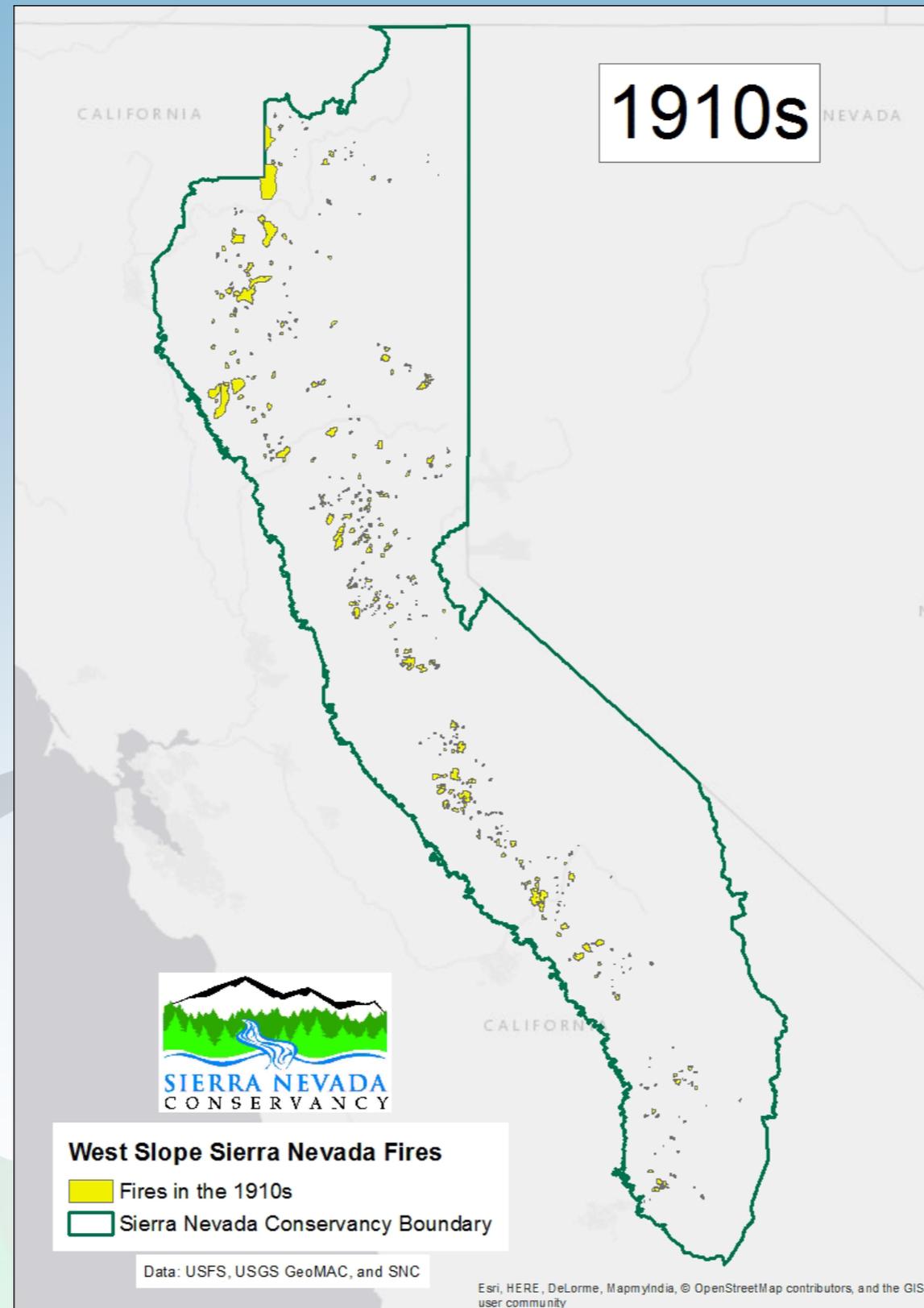
- Methane
- Black carbon
- Fluorinated gases (“F-gases”)
- Tropospheric ozone

Ozone and black carbon are also harmful air pollutants. Broad action to reduce short-lived climate pollutants can cut global warming in half by 2050 and save an estimated 2.4 million lives annually, by 2030.

2013 CA Black Carbon Emission Sources - CARB

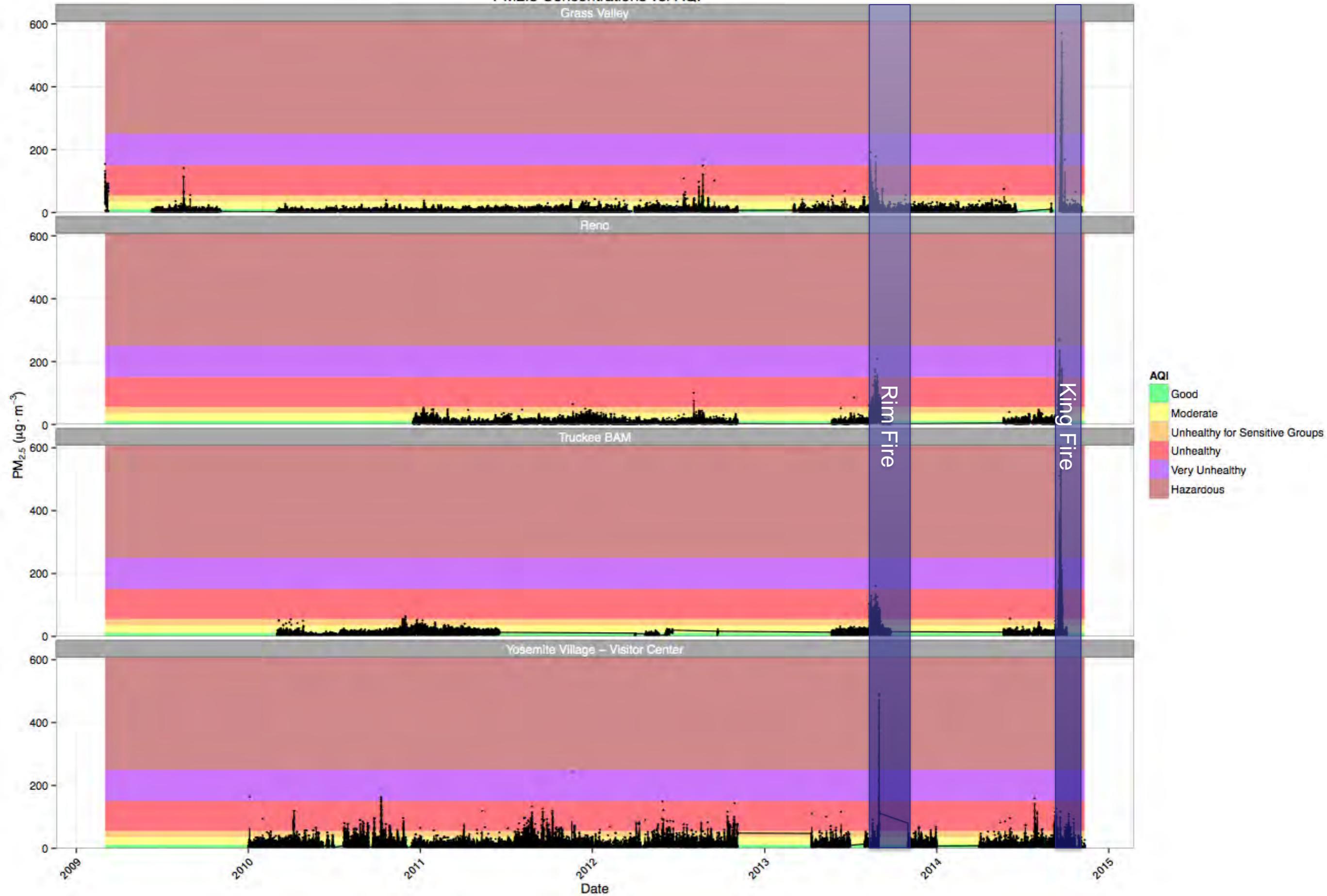


Size of Fires - Emissions



Air quality during the Rim and King Fires

Seasonal, 1-hr (points) and 24-hr (line) Rolling Average
PM2.5 Concentrations vs. AQI



Vegetation Density - Emissions

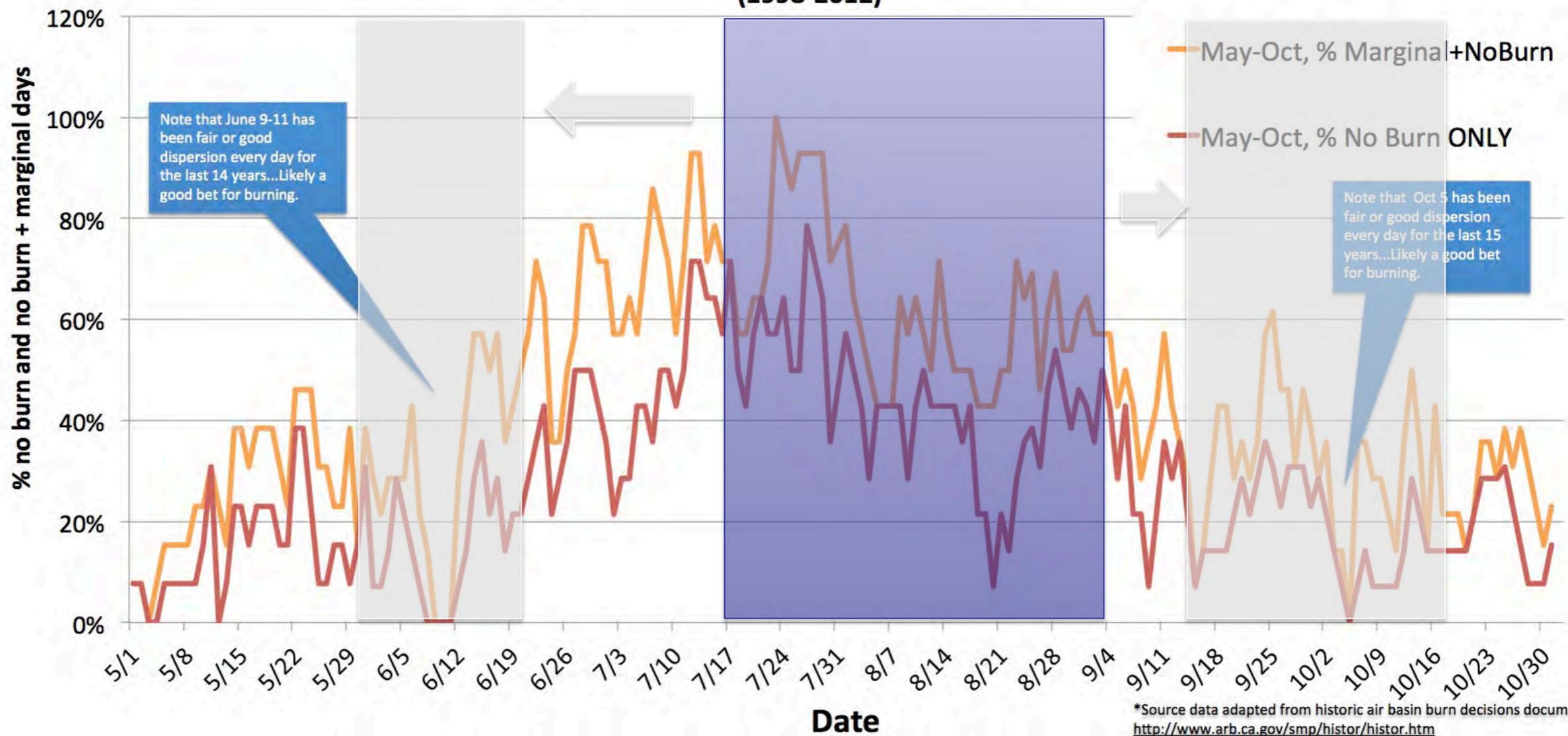


Vegetation Density - Emissions



Matching emissions to dispersion

14-Year History of Burn Days for South Mountain Counties: Percent Marginal vs. Percent Marginal+No-Burn (1998-2012)



*Source data adapted from historic air basin burn decisions documented at: <http://www.arb.ca.gov/smp/histor/histor.htm>

Slide from Leland Tarnay

TNC Study



TNC Study



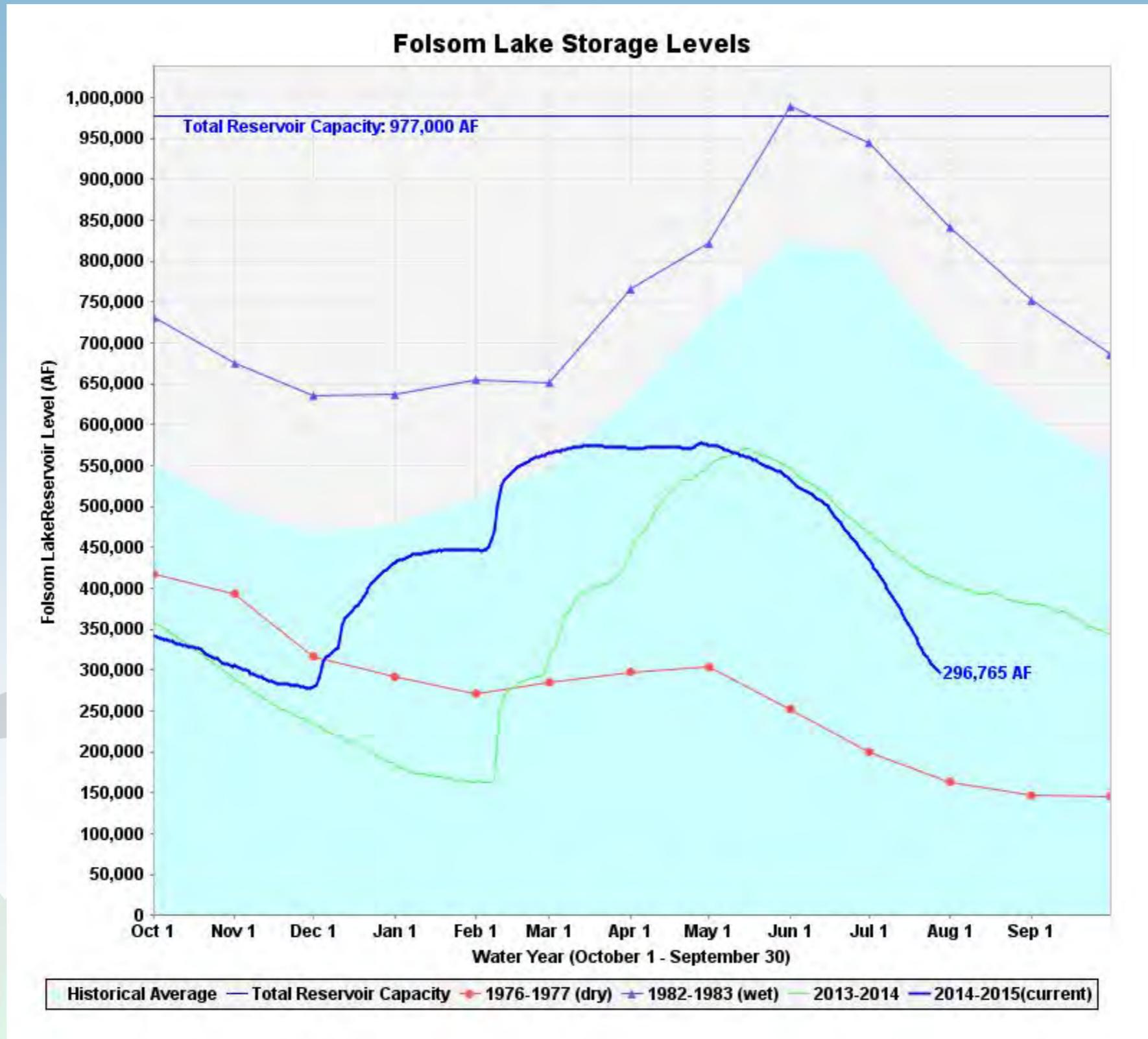
Before

Photo Credit: The Nature Conservancy



After

Water Storage

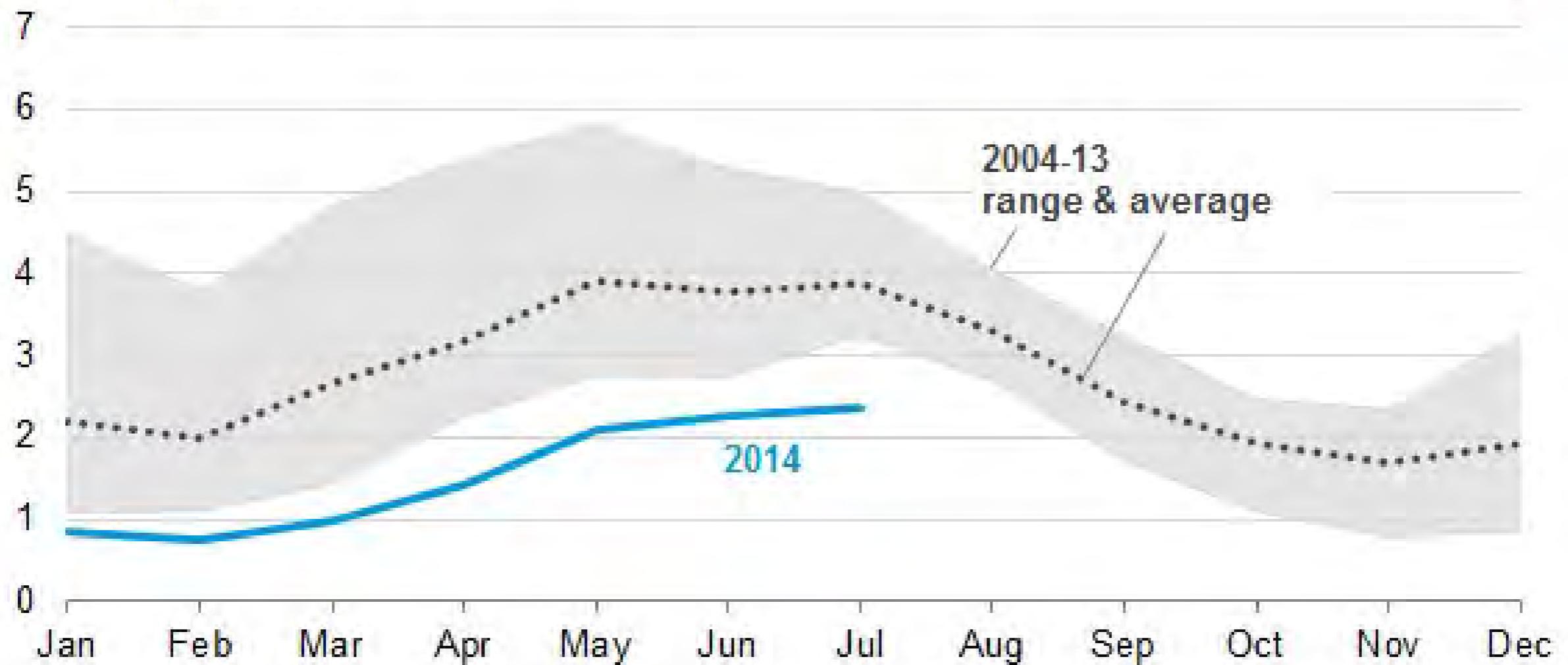


Vegetation Density – Water Yield



Hydropower – Water Yield

California hydropower net generation
million megawatthours



Hydropower – Deficit

California Electrical Energy Generation

California Electrical Energy Generation* Total Production, by Resource Type (Gigawatt Hours)

	2010	2011	2012	2013	2014
California Generation plus Net Imports *	291,141	293,761	302,239	296,850	292,575
Total Hydroelectric	34,222	42,731	27,459	24,097	16,477
Large Hydroelectric	29,040	36,355	23,133	20,754	14,052
Small hydroelectric	5,182	6,376	4,326	3,343	2,424
Nuclear	32,214	36,666	18,491	17,860	17,027
In-State Coal	3,406	3,120	1,580	1,018	988
Oil	52	36	48	38	46
Natural Gas **	109,882	91,270	121,877	121,088	121,855
Geothermal	12,740	12,685	12,733	12,479	12,183
Biomass	5,960	5,986	6,121	6,429	6,351
Wind	6,172	7,598	9,242	12,694	12,908
Solar	912	1,097	1,831	4,287	10,365
Other	12	13	14	14	16
Direct Coal Imports***	13,119	13,032	9,716	11,824	12,370
Other Imports****	72,451	79,525	93,126	85,022	81,990

