CHARTER

Ecological Performance Measures Working Group

Timber Regulation and Forest Restoration Program June 10, 2015

Mission and Background

Mission The Mission of the Ecological Performance Measures Working Group is the development of and implementation planning for ecological performance measures, as called for by Assembly Bill (AB) 1492:¹

- "The Legislature further finds that the state's forest practice regulatory program needs to develop adequate performance measures to provide transparency for both the regulated community and other stakeholders." Public Resources Code (PRC) § 4629.1
- "On or before January 10, 2013, and on each January 10 thereafter in conjunction with the 2014–15 Governor's Budget and Governors' Budgets thereafter, the Secretary of the Natural Resources Agency, in consultation with the Secretary for Environmental Protection, shall submit to the Joint Legislative Budget Committee a report on the activities of all state departments, agencies, and boards relating to forest and timberland regulation. This report shall include, at a minimum, all of the following:...
 - (8) In order to assess efficiencies in the program and the effectiveness of spending, a set of measures for, and a plan for collection of data on, the program, including, but not limited to:...
 - (F) Evaluating ecological performance." PRC § 4629.9(a)

The latter section of the PRC provides AB 1492's most specific and direct language regarding ecological performance measures. Based on this direction, the <u>primary focus</u> of ecological performance measures will be to support the various forest-related regulatory programs that are addressed by the AB 1492 agencies/departments/boards. In particular, this scope includes providing information that will be useful to the regulatory entities, the Legislature, regulated parties, and the public for evaluating the effectiveness and efficiency of these programs in reaching their environmental goals. The ecological performance measures have to support consideration of not just standard commercial timber harvest, but also other forest management activities, such as biomass removal, fuels management, and carbon offset projects. In addition to supporting backward-looking program evaluation, the ecological performance measures also will be useful in a forward-looking mode for project planning.

A <u>secondary focus</u> for the ecological performance measures will be on broader purposes, such as creating linkages with other governmental planning or assessment activities; for example, the State

¹ http://leginfo.legislature.ca.gov/faces/billNavClient.xhtml?bill_id=201120120AB1492&search_keywords=

Wildlife Action Plan, Forest and Rangeland Resource Assessment, California Biodiversity Council indicators project, State Water Plan, and National Forest Plans.

The California Natural Resources Agency (CNRA) and the California Environmental Protection Agency (CalEPA) have the primary responsibility for the development of the full scope of ecological performance measures, monitoring, and data management of concern to the agencies and the public under AB 1492. The Ecological Performance Measures Working Group will take the lead in planning and conducting this work, under the guidance of the AB 1492 Leadership Team, CNRA, and CalEPA, as well as with the formal advice of the AB1492 Advisory Committee. The work of the Ecological Performance Measures Working Group will be closely linked with its sister AB 1492 entity, the Data and Monitoring Working Group.

CNRA and CalEPA, through the timber harvest review team agencies [Departments of Conservation (California Geological Survey), Fish and Wildlife, and Forestry and Fire Protection (CAL FIRE) at CNRA; State and Regional Water Boards at CalEPA] will take coordinated actions, through the Ecological Performance Measures Working Group and AB 1492 Leadership Team, to develop ecological performance measures. The review team agencies recognize the importance of providing opportunities for public input into this work. The Timber Regulation and Forest Restoration Program has developed a one-page description of its public information, input, and participation processes. This document is posted on the Program website at: <u>http://resources.ca.gov/forestry/</u>.

Figure 1 at the end of this Charter shows how the Ecological Performance Measures Working Group fits in with other elements of the AB 1492 program and its collaborative relationship with the Board of Forestry and Fire Protection's Effectiveness Monitoring Committee (EMC).

As discussed in the AB 1492 Annual Report for 2014², developing ecological performance measures for management outcomes on the State's forestlands is a challenging task that will take significant effort and some time to accomplish. The task is likely to require additional resources for the review team agencies, including scientific and technical expertise and public input process expertise.

The challenges to developing ecological performance measures include:

- Identifying science-based performance measures that can be applied across the great diversity of the forest ecosystems found on the state's forestlands;
- Developing a system of performance measures that has a scientific basis and is recognized as suitable by the review team agencies, other state and federal natural resource agencies, regulated forestland owners, environmental organizations, the Legislature, and other stakeholders;
- Determining the appropriate scale or scales at which to develop the measures (e.g., site, project, watershed, ownership, hydrologic basin, bioregion, forest practice district, state);
- Developing ecological performance measures for these scales of analysis;
- Creating a comprehensive baseline understanding of current ecological conditions, including, as appropriate, reference conditions;
- Determining how to address mixed-ownership (e.g., intermingled private and federal) forestlands;
- Expressing goals and objectives, and an understanding of the trade-offs among them (e.g., the value of having one habitat versus another habitat type on a given area);

² Ecological Performance Measures also are explored in the 2014 Assembly Bill 1492 Annual Report to the Joint Legislative Budget Committee. http://resources.ca.gov/forestry/docs/AB-1492_Annual_Report_2014_to_Legislature_FINAL.pdf

- Thoroughly evaluating and reporting on the linkage between timberland management activities and mitigations and how these affect ecological health;
- Expressing relationships among ecological performance targets and landscape metrics as models to enhance interpretation of results and to enable identification and testing of assumptions;
- Accurately characterizing timberlands by empirical metrics as well as Forest Practice Rule compliance;
- Identifying the data needs for selected performance measures, determining whether these data are available, and developing approaches to collecting data where they are lacking (this item bridges into the work of the Data and Monitoring Working Group);
- Crafting and testing performance-measure-appropriate sampling systems;
- Developing a system of performance measures that is meaningful and that can be practically achieved with available resources.

The Ecological Performance Measures Working Group, operating under the direction of the AB 1492 Leadership Team, will play the lead role in the development of ecological performance measures. As needed, the review team agencies will endeavor to bring in expertise that is not available within the state agencies to assist in the development of ecological performance measures and related monitoring needs. The Natural Resources Agency has been appropriated initial funding (\$200,000 per year for two years) to bring in both science and public input process experts to assist with the development of ecological performance measures. We are entering into interagency agreements with the Center for Collaborative Policy (Sacramento State University) and the University of California Cooperative Extension Forestry for this assistance.

A secondary question regarding ecological performance measures is how these measures may be able to be integrated with environmental indicators that are used for other state or federal agency monitoring and planning activities. Examples include the State Water Plan (prepared by the Department of Water Resources), the Forest and Rangeland Resource Assessment (prepared by CAL FIRE), the State Wildlife Action Plan (prepared by the Department of Fish and Wildlife), Water Quality Control Plans (also called "basin plans," prepared by the Regional Water Quality Control Boards), National Forest Management Plans (prepared by the USDA Forest Service), and the Governor's Environmental Goals and Policy Report (Governor's Office of Planning and Research). The California Biodiversity Council is currently exploring how state and federal agencies may be able to develop and maintain over time a set of common environmental indicators. There may be potential for the environmental data and ecological performance indicators developed under the auspices of AB 1492 to help support this common set of indicators, or for these indicators to help support the AB 1492 ecological performance measures.

The development of ecological performance measures coupled with spatially and temporally nested monitoring can help to drive an adaptive management approach for the state's system of regulating timber harvest activities. While an adaptive management approach is not explicitly called for in AB 1492, it is a natural and needed extension of ecological performance measures. Where the ecological performance measures and associated monitoring data indicate that desired forest conditions or trends are not being achieved as the result of forest management and the regulatory, technical assistance, and grant programs focused on forest management, the agencies can then modify program approaches to improve ecological performance. These modifications could occur through means such as focused harvesting plan review or inspection, continuing education of Registered Professional Foresters or Licensed Timber Operators, modification of regulations, or targeting of restoration grant programs to address problems that arise outside of the contemporary commercial timber harvesting context.

Once a preferred set of ecological performance measures is selected, the review team agencies will identify additional resources needed to fulfill the data collection and analysis required to feed the performance measures and support the associated adaptive management process. The agencies may accordingly seek appropriate opportunities to propose budget change proposals for any needed funds and staffing. The Timber Regulation and Forest Restoration Fund represents an appropriate funding source for such needs as may be identified, to the extent that funds are available.

Duties of the Ecological Performance Measures Working Group

 Develop a stakeholder outreach and communication plan for gathering input on potential approaches to identifying and quantifying ecological performance measures. Substantial stakeholder input opportunities must be provided to help ensure the development of scientifically and socially sound performance measures.

Tasks:

- A. Contract for assistance with outreach and communication.
- B. Work with the AB 1492 Leadership Team to develop a list of stakeholders (including contact information) to be targeted for outreach.
- C. Include the University of California Cooperative Forestry Extension as a partner in conducting outreach.
- D. Work with the contractor(s) to conduct a stakeholder analysis and develop a stakeholder outreach plan, including periodic public outreach meetings and worksjops.
- E. Develop an informational webpage that allows interested parties to sign up to receive update notices.
- F. Implement the outreach plan and modify it over time, as needed.
- 2. Develop a brief background paper on approaches to ecological performance measures. The intent of the paper is to provide a starting point for discussions with stakeholders, including the first stakeholder outreach workshop.

Tasks:

- A. Identify persons within Review Team or related agencies who have knowledge or expertise to provide.
- B. Identify general questions related to ecological performance.
- C. Survey literature and websites.
- D. Outreach to knowledgeable parties both inside and outside of state agencies, including the University of California Cooperative Forestry Extension, university faculty, consultants, California Water Quality Management Council, stakeholders, and the Board of Forestry and Fire Protection's Effectiveness Monitoring Committee.
- E. Develop a simple conceptual framework. Ideally, the framework should:
 - a. Support the evaluation of the environmental protection effectiveness of state regulatory programs that address forest management.
 - b. Seek to nest ecological performance measures within a broader monitoring framework that allows for linkage between spatial and temporal scales.
 - c. Seek to select performance measures that are sensitive to land management actions to ensure that the adaptive management cycle can be completed.

- F. Seek to integrate with existing efforts to address ecological performance or conditions [e.g., indicator-based efforts of the State Wildlife Action Plan (DFW), Forest and Rangeland Resources Assessment (CAL FIRE), State Water Plan (DWR), Water Quality Control Plans (Regional Water Quality Control Boards), and National Forest plans (U.S. Forest Service)].
- G. Prepare, or engage a contractor to prepare, a brief (<=20 pp.) background paper and share it with stakeholders.
- H. Conduct initial stakeholder workshops on ecological performance measures, using the background paper as a starting point for discussion.
- I. Include the AB 1492 Advisory Committee in the process.
- J. Identify potential individuals or organizations with critical scientific or technical skill necessary to support the development of ecological performance measures, for consideration as contractors or as potential peer reviewers of products.

3. Develop a draft set of ecological performance measures.

Tasks:

- A. Identify specific questions related to ecological performance.
- B. Contract with outside scientific or technical expertise as necessary to assist in the development of ecological performance measures. The Ecological Performance Measures Working Group will work closely with these experts.
- C. Following the initial stakeholder workshop described above, begin developing an initial draft set of measures.
- D. Develop hypotheses that can be tested using ecological performance measures.
- E. Work closely with Data and Monitoring Working Group regarding the availability of the data that are needed to support any ecological performance measures under consideration.
- F. Work closely with the Interagency Information Systems Working Group on data management needs related to the ecological performance measures under consideration.
- G. As appropriate, coordinate with the Board of Forestry and Fire Protection's Effectiveness Monitoring Committee in the development of ecological performance measures.
- H. At appropriate points as work progresses, conduct periodic outreach to key stakeholders and experts on an individual or collective basis, including public meetings or workshops.
- I. Develop an initial draft set of ecological performance measures, release them for public review and comment, and hold a public workshop.
- J. Work to develop a revised draft set of ecological performance measures.
- K. At appropriate points as work progresses, conduct periodic outreach to key stakeholders and experts on an individual or collective basis, including public meetings or workshops.
- L. Complete a revised draft set of ecological performance measures, release them for public review and comment, and hold a public workshop.
- M. As above process evolves, review work product with and receive feedback from the AB 1492 Advisory Committee at appropriate points in the process.

4. Develop a final working set of ecological performance measures, an implementation plan, and an adaptive management approach.

Tasks:

- A. Based on input received on the revised draft ecological performance measures, prepare a second draft set of ecological performance measures.
- B. Develop a draft implementation plan for the ecological performance measures, working with the Data and Monitoring Working Group, Interagency Information Systems Working Group, and the Board of Forestry and Fire Protection Effectiveness Monitoring Committee on matters within their respective scopes.
- C. Design an adaptive management approach for program monitoring, evaluation, and modification over time.
- D. At appropriate points as work on items A-C progresses, conduct periodic outreach to key stakeholders and experts on an individual or collective basis, including public meetings or workshops.
- E. When work on items A-C is completed, conduct stakeholder outreach workshops on the second draft set of ecological performance measures, draft implementation plan, and draft adaptive management design. These three elements should form an integrated package.
- F. In response to stakeholder comments, develop the final working set of ecological performance measures, implementation plan, and adaptive management approach.
- G. As needed, develop and implement pilot projects to test or refine the ecological performance measures.
- H. As above process evolves, review work product with and receive feedback from the AB 1492 Advisory Committee at appropriate points in the process.

Preparation of a Work Plan

Upon establishment, the Ecological Performance Measures Working Group will develop a Work Plan. The first Work Plan will address the activities necessary to complete the duties described above in a timely fashion. The Working Group will review the Work Plan at the end of each fiscal year, or other times, as needed, and update it as necessary. All Work Plans will be submitted to the AB 1492 Leadership Team for review and approval. Stakeholder input will be solicited on draft Work Plans.

Tentative Major Milestones

- 1. Work plan for the Ecological Performance Measures Working Group Completed: end of July 2015.
- 2. Background paper on approaches to ecological performance measures completed: Fall 2015.
- 3. First stakeholder outreach workshops: Fall 2015.
- 4. Initial draft set of ecological performance measures completed: Spring 2016.
- 5. Second draft set of ecological performance measures, draft implementation plan, and draft adaptive management plan completed: Fall 2016.
- 6. Final working set of ecological performance measures, implementation plan, and adaptive management plan completed: End 2016
- 7. Budget change proposal for implementation plan: 2017/18 fiscal year.

Based on the outcomes of processes, these timelines may need to be adjusted.

Working Group Membership and Leadership

The Working Group will be composed of staff from the review team agencies. One member will be from the University of California Cooperative Forestry Extension staff. The review team agencies will select a Chairperson and a Vice Chairperson for the Ecological Performance Measures Working Group. The Vice Chairperson will chair meetings of the Working Group in the absence of the Chairperson. The AB 1492 Leadership Team requests each agency to assign at least one staff person and a back-up person to the Working Group.

Subcommittees

The Working Group may establish subcommittees as needed to accomplish its work. The subcommittees will operate with well-defined scopes of responsibility and clearly articulated tasks and timelines.

Consultation

When additional expertise is needed to assist the Working Group and/or its subcommittees in completing their work, assistance may be requested from the review team agencies non-timber program staff, or from other state and federal agencies, such as NOAA Fisheries, U.S. Fish & Wildlife Service, USDA Forest Service, or from professional and scientific organizations, and educational or research institutions.

Public Input and Participation

Public input and participation are a very important part of the work that this Charter describes. The Working Group will be guided in this by the document, *Timber Regulation and Forest Restoration Program Public Process Approaches*.

AB 1492 Advisory Committee

The work of the Ecological Performance Measures Working Group will be subject to periodic review and advising by the AB 1492 Advisory Committee. The responsibilities of the Advisory Group are spelled out in its charter.

Review and Modification of this Charter

The AB 1492 Leadership Team is responsible for the approval of this charter and its maintenance and modification over time. The Leadership Team will provide the public with the opportunity to comment on any significant changes it proposes to make to the charter. The Leadership Team will review the charter at least annually to determine if any modifications are warranted.



Figure 1. Organizational Framework for AB 1492 Program Structure and its Relationship to the Board of Forestry and Fire Protection and its Effectiveness Monitoring Committee.