California Water Plan Update 2009
Notes from Ecosystem Restoration Management Strategy Workshop
July 11, 2008

Please submit written comments to the California Water Plan program, cwpcom@water.ca.gov, by August 11, 2008.

I. Ecosystem Restoration in California

- Aquifers are considered part of the ecosystem (i.e. when water is routed onto floodplain)
- Add a statement about the overlap with other Water Plan resource management strategies, including Conjunctive Management & Groundwater Storage.
- Consider negative effects of groundwater overdraft on riparian wetlands. A more integrated approach would include both human use and provide for the ecosystem.
- Make the introduction less "Delta-centric" and show that ecosystem benefits are statewide in scope.
    - Under Current Activities, all of the examples are based in the Delta.
    - Page 1, last sentence, on exotic species, replace the term "dominant" with "prevalent"
    - ACTION: Ted Frink, DWR, will work with author Michael Perrone
- Suggestion to add information on regulatory context in the introduction. Other resource management strategies refer to key legislation and rules.
- Add that 90 percent of historic forest and riparian habitat has been lost
- Suggestion to consider ecosystem valuation in terms of "natural capital", which is a counterpart to physical capital (a water treatment plant) and human capital (skills needed to build and operate the plant).
    - It is difficult to find quantitative values for California, but other states and countries have cases studies (e.g. New York City and Birmingham, England).

II. Potential Benefits of Ecosystem Restoration

- Flag the use of the term "natural ecosystem" to include native peoples and traditional lifestyles
- Include a section on "Water Quality" as a key benefit, alongside "Water Supply" and "Flood Management"
- Coordinate this Ecosystem Restoration strategy narrative with the current draft of the Forest Management strategy narrative.
- Page 3, change the benefits section subtitle "Water Supply" to "Reliability of Water Supply." This is to avoid implying that ecosystem restoration adds new supply; by restoring the environment, there is less water for human activities. If ecosystem restoration is done using a multi-benefit approach, it cab bring more water supply reliability (sustainability) over time.
- Page 3, paragraph 3, fix typo "500,00 AF" to "500,000 AF"

- The Association of State Wetlands Managers has done work looking at wetland-related ecosystems

III. Potential Costs of Ecosystem Restoration

- It would be helpful to quantify benefits – not just the types of activity but also how much we can achieve with a given level of resources
- There was concern that if we say X amount of resources leads to Y amount of restoration, then people may be have the impression that Y amount of restoration is the optimal amount of restoration. However, Y amount may not be an end goal.
- There was also concern that people may think that there will be recovery of endangered species if a certain amount of money is spent; there was concern about leaps of the public's imagination if there are not boundaries.
- Adjust for net present value of dollars for when comparing benefits and costs in present and future.
- Bond measures – mention the costs of bond measures and what bond money is available. Incorporate a statistics of known losses in wetland acres, to set the stage for funding justification of costs.
- In some cases, ecosystem restoration can be viewed as a fringe benefit for other processes if done in a comprehensive way, such as floodplain modification
- Use imagery or a startling statistics to give a concept of scale and order of magnitude to help the reader to understand to big picture; concept of scale for takeaway message is more memorable than precise figures.

IV. Major Issues Facing Ecosystem Restoration

- Consider as new issue: creation of methyl mercury in restored wetlands
- Consider mentioning Habitat Conservation Plans (HCPs); they tend to include riparian/aquatic issues and are mandated by CA Department of Fish and Game.
- Pressure for low-cost urban development vs. ecosystem and agriculture in the low-lying flatlands. Housing can be built in uplands, but you cannot flood the side of a mountain.
- Acknowledge progress in non-structural flood management being promoted as a preferred way of dealing with flood risk, being done at local levels with IRWMPs
- Consider a new issue: **public resistance to active ecosystem restoration** methods, such as mechanical thinning of riparian forests, controlled burning, etc.
- Need new heading on "**Instream Flows**." Expand as an issue the need to actually describe actual instream flow needs (an earlier version of the Ecosystem Restoration narrative had a discussion of instream flows at the beginning)

V. Recommendations to Facilitate Water-dependent Recreation

- Consider a **recommendation for a program to engage farmers and give them financial incentives** to maintain habitat.
- Consider recommendation to **clarify the Williamson Act protections on working landscapes**. When the law was originally drafted, society did not recognize the value of intermittent flooding and conjunctive use of land for habitat and farming. Amend law to continue to protect lands from development and allow natural functions to proceed.
    - Action: Bruce Gwynne, CA Department of Conservation will propose text to the author Michael Perrone, DWR.
- Consider recommendation to **reconnect streams to their historic groundwater basins.**
- Consider recommendation to **research the effectiveness of restoration projects**.
- Have a nexus to the IRWM Program; to the extent that IRWMPs are required to have ecosystem stewardship, we may provide recommendations on how to proceed in future integrated regional water management.

Attendance
Jared Aldern, Prescott College
Josh Brown, SRCAF
Chad Dibble, DFG
Melvin Garmen, North Fork Mono Tribe
Ron Goode, North Fork Mono Tribe
Bruce Gwynne, DOC LRP
Barbra Hennigan, BSAGU
Barry Hill, US Forest Service
John Hopkins, IEH
Rebecca Kanegawa, MWH
Alex Stehl, CA State Parks
Betty Yee, RWQCB

<u>DWR and Facilitation Staff</u>
Lisa Beutler, CCP
Barbara Cross, DWR
Megan Fidell, DWR
Ted Frink, DWR
Kamyar Guivetchi, DWR
Lew Moeller, DWR
Michael Perrone, DWR
Roy Peterson, DWR
David Sumi, CCP