Irrigated Lands Discharge Program (Program)
Advisory Group Meeting #2
Tulelake Sub-Regional Meeting
Meeting Summary
2/29/2012

Attendees

Advisory Group Members & Staff

- Sam Magill, Center for Collaborative Policy
- Rob Wilson, UC Cooperative Extension
- Brad Kirby, Tulelake Irrigation District
- Otto Huffman, Modoc County Farm Bureau
- Dee Samson, Lava Beds/Butte Valley Resource Conservation District
- Erica Terrance, Klamath Riverkeeper
- Curt Mullis, Klamath Water Users Association
- Rebecca Fitzgerald, North Coast Regional Water Quality Control Board (Regional Water Board)
- Ben Zabinsky, Regional Water Board
- David Leland, Regional Water Board
- Ned Coe, CA Farm Bureau Federation
- Matt St. John, Regional Water Board
- Dave Mauser, US Fish and Wildlife Service (FWS)
- Gene Kelly, Natural Resources Conservation Service (NRCS)
- Rick Carlson, Bureau of Reclamation (USBR)

Public

- Gary Wright, Tulelake Irrigation District
- Theresa Wright, Wright Farms
- Greg Addington, Klamath Water Users Association
- Geri Byrne, Modoc County Supervisor
- John Giaimo, Plant Sciences
- Ryan Hartman, NRCS
- Eric Peltz, NRCS
- Earl Danosky, Tulelake Irrigation District
- Steve Kandra, Westside Irrigation District
- Joe Sammis, Butte Valley Irrigation District
- Mike Byrne, Resource Conservation District
- Bill Eyne, Tulelake Irrigation District
- David King, farmer
- Greg Herman, Siskiyou County Agricultural Commissioner's Office
- Lawrence Babb
- Steve Canner, farmer
- Lucky Ackley, Modoc County Farm Bureau

Phone

- Samantha Olson, Regional Water Board
- Glen Spain, Pacific Coast Federation of Fishermen's Associations

ACTION ITEMS

1. Regional Water Board staff will provide a presentation of potential regulatory mechanisms for the Program at a future meeting.
2. Advisory Group members will forward a request for additional members to interested parties. These participants must join the Advisory Group via the process laid out in the Charter.
3. Staff will follow up on suggestions from Dee Samson for additional Advisory Group members from the Butte Valley area.

4. Erica Terence will send the Marshall Granite Study to staff for distribution to the Advisory Group.
5. Staff will provide a presentation on identified beneficial uses within the Tulelake/Butte Valley area at a future meeting.
6. Staff will provide a presentation on the coordination activities taking place as part of the Klamath TMDL Action Plan at a future meeting.
7. Staff will provide a draft definition of Program scope for Advisory Group comment at the next Sub-Regional Advisory Group meeting.
8. Staff will provide a presentation on the existing State Water Resources Control Board fee schedule at a future meeting.

SUMMARY

****PRESENTATION AVAILABLE ONLINE AT http://www.waterboards.ca.gov/northcoast/water_issues/programs/irrigated_lands/****

Opening, Introductions, and Logistics Issues

David Leland opened the meeting and thanked participants for attending. Sam Magill reviewed the agenda, discussed meeting logistics, and informed participants that any suggestions for additions to the Advisory Group membership should go through the formal process laid out in section three of the Advisory Group Charter.

Presentation & Discussion of Key Terms for the Program

Ben Zabinsky presented information on key, legally defined terms for the Program, the proposed Program scope, and a potential name change for the Program. After the presentation, the following discussion was recorded:

- Curt Mullis asked if the Advisory Group would discuss regulatory mechanisms for the Program. Ben Zabinsky responded that while it is not the focus of this meeting, it will be a focus of future Advisory Group meetings. Mr. Magill added that a full presentation of potential regulatory mechanisms for the Program will be presented at a future meeting (**See Action Item #1**).
- Steve Kandra commented that political boundaries (between Oregon and California) may complicate Program development in the Tulelake/Butte Valley area, and asked if the Program will be coordinated with similar efforts in Oregon. Mr. Leland responded that coordination is happening through a Memorandum of Understanding (MOU) with Oregon Department of Environmental Quality. The intent is to align water quality requirements on both sides of the border as much as possible.
- Brad Kirby asked if the Program will have separate requirements for different sub-regions within the North Coast Region, or a single set of rules for the entire area. Mr. Zabinsky responded that the Regional Water Board is trying to develop a Program to cover the entire region that provides enough flexibility to recognize the significant differences between sub regions.
- Rob Wilson suggested that additional members of the grower/rancher community be invited to join the Advisory Group. Matt St. John acknowledged that additional members

may need to be added, and asked that existing members encourage potential participants to join through the process laid out in the Charter (**see Action Item #2**).

- Gary Wright asked if the California Water Code drives the Program development process. Mr. Leland responded that the State Nonpoint Source (NPS) Policy directs the Regional Water Board to address all nonpoint sources of discharge, including those associated with agriculture. Mr. St. John added that if there isn't a discharge of waste, the Regional Water Board is not concerned and doesn't need to be involved in individual agricultural operations.
- Mr. Wright asked if this Program will duplicate regulations already in place to control pesticide application. Mr. Zabinsky responded that the California Department of Pesticide Regulation already has regulations in place for pesticide application. To the extent that existing regulations already meet the requirements of this Program once developed, they will not be duplicated.
- Otto Huffman noted that the Tulelake/Butte Valley area is unique in that it is mostly a "closed" system. Farmers use and reuse water, so determining a single polluter may be difficult. Furthermore, since the system is closed and "self-protecting," the only point of discharge is the Klamath Straits Drain. Mr. Leland acknowledged that while the Straits Drain is a major focus, the existing Total Maximum Daily Load (TMDL) for the Lost River has some requirements that this Program will need to meet in addition to any issues at the Straits Drain.
- Erica Terrance asked how temperature pollution falls within the definition of "waste." Mr. Leland responded that it can be considered a "waste" when it comes from heated point source discharge (such as a power plant.) In other circumstances like riparian vegetation, it is a "controllable factor."
- Mr. Kandra asked if a farmer who receives irrigation water with a high pH/high temperature/nutrients puts the water back into the stream with reduced pH/lower temperature/fewer nutrients is in compliance with the Program. Mr. Leland responded that the Regional Water Board generally holds that individuals are only responsible for what they add from their own operations. However, if an individual's operations facilitate the movement of waste from one area to another, he or she may be responsible. Samantha Olson added that the need for a permit for waste discharge can be triggered by any discharge of waste. The definition is very broad. Mr. Leland added that this Program is likely to be best management practice (BMP) based. If a landowner implements effective BMPs, they will be in compliance with the Program.
- Greg Addington asked how the non-agricultural activities on the Klamath National Wildlife Refuge (Refuge) will be covered in the Program. Mr. St. John responded that non-agricultural operations will not be regulated by the Program. The water delivery connections within the Refuge could be part of the Program, but how that coordination will happen is yet to be determined. Dave Mauser added that the Refuge is interested in BMPs to implement.
- Ms. Terrance asked why it's been pre-determined that BMP tracking will be favored over water samples to determine compliance. Mr. Zabinsky responded that this should be up for discussion. Some combination of BMPs and point-specific monitoring may be needed. Additionally, landowner coalitions could be formed to do point-specific monitoring on a broader scale to reduce costs to individuals. Mr. Leland noted that other regions in California and throughout the country have adopted the BMP approach

to NPS pollution with success. Ms. Terrance acknowledged that it may be the correct approach, but added that it might be more efficient for some landowners to monitor above and below to determine compliance.

- Meeting participants asked how illegal agricultural activities like marijuana grows will be regulated by the Program. Mr. Leland acknowledged that this will be a major challenge. The Regional Water Board is involved in a number of outreach programs to work with the medical marijuana community. Working with illegal growers is much more difficult and poses a safety risk for staff.
- Mr. Kandra asked what a management unit consists of for the Program. Mr. Zabinsky responded that the Program will likely take the form of a general permit for individual landowners.
- Members of the public noted that the Butte Valley is a closed system that doesn't drain to Klamath, and asked if it needs to enroll in the Program at all. Mr. Leland responded that groundwater also falls under the scope of the Program.
- Mr. Mullis asked what the source of funding for BMP and monitoring programs will be. Mr. Leland responded that traditional sources of funding for farm improvement activities like NRCS could be used, as well as bonds.

Presentation and Discussion of Program Principles and Goals

Mr. Zabinsky delivered a presentation on proposed goals and principles for Program development. After the presentation, the following discussion was recorded:

- Mr. Mauser asked if nutrients are the primary concern on the Lost River. Mr. Zabinsky confirmed that they are. There is also dissolved oxygen and organic matter TMDL on the Lost River, but these are directly related to nutrients.
- Mr. Wright suggested that, since the Program will cover both Tulelake and the Butte Valley, additional members should be added from the Butte Valley area. Staff will follow up with suggested membership additions from Dee Samson (**see Action Item #3**).
- Meeting participants discussed the hydrologic connectivity between Butte Valley and the Klamath River. Several participants stated that the Butte Valley is a closed system and doesn't drain to any surface or groundwater sources. Ms. Terrance agreed to provide the Marshall Granite Study to Advisory Group members for more information (**see Action Item #4**).
- Mr. Zabinsky asked what the receiving waters in the Butte Valley are. Gene Kelly responded that a number of small creeks discharge to the Klamath subsurface, but because precipitation in the Butte Valley is so low, runoff is very infrequent.

Group Exercise: Identifying Local Risks to Water Quality

Meeting participants identified local risks to water quality and opportunities for improvement based on the goals presentation discussed above. Mr. Leland opened the discussion by suggesting that the Program could be structured to put several "tiers" for enrollment in place. The bottom tier could include those growers that pose such a minimal risk to water quality that they do not need to be regulated by the Program at all. Those growers that pose a very small risk to water quality could be included in the Program but not enroll. Growers who pose a

moderate risk would have to enroll, and those who pose a substantial risk would enroll and be subject to additional requirements. The following discussion was recorded:

- Staff asked if there are any erosion/sedimentation issues in the Tulelake/Butte Valley area. Mr. Kelly was not aware of irrigated-induced erosion issues; Mr. Huffman said that there may be some in the Tulelake area, but they are extremely minimal.
- Mr. Mauser asked if erosion from wind will factor in as a sediment source. Staff responded that if the erosion is caused from tillage practices, it could be considered a waste source. If the sediment does not get into a water system, it is unlikely that the Program would cover it.
- Meeting participants discussed other sediment sources in the area, and noted that they do not end up in surface waters. Most sediment is removed from surface waters via settling basins in the Refuge and ponds on farms. One participant responded that while this does tend to remove nutrients and sediment before water reaches the Klamath River, waters of the state also include drainage ditches and canals. Mr. Huffman noted that water in ditches and canals is not used for fish/wildlife; agriculture is the primary beneficial use in the Tulelake/Butte Valley area. Mr. Magill suggested that staff provide a presentation on identified beneficial uses within the Tulelake/Butte Valley area at the next meeting (**see Action Item #5**).
- Erica Terrance commented that since the Lost River does drain to the Klamath River, water quality in the Lost River is important for multiple beneficial uses in addition to agriculture. Mr. Huffman noted that the Lost River doesn't historically pump into the Klamath; existing drains are artificial. Mr. St. John encouraged participants to think beyond whether the delivery mechanisms are natural or artificial, and consider what the contribution of waste to the Klamath River is from the Tulelake/Butte Valley area.
- Mr. Leland asked if tailwater returns and tile drain water contain waste (high temperatures, nutrients, organic matter, etc.) Mr. Huffman responded that there is minimal tailwater return throughout the area. Groundwater in the area is already extremely high in nutrients and generally not used for anything (especially sensitive beneficial uses like drinking water).
- Mr. Leland asked if fertilizers and pesticides are applied at agronomic rates. Mr. Huffman responded that they are. In some cases, growers deficit fertilizer due to the high cost of fertilizers.
- Participants noted that water flows downstream from Oregon and contributes to water quality issues. Mr. Spain noted that Oregon has an obligation to meet California standards, but that California does contribute to waste issues on some level (even if the contribution is small). Mr. Leland concurred.
- Mr. St. John asked if growers in the area have the opportunity to contribute to overall water quality improvement in the area through BMP implementation. Meeting participants said there are opportunities for improvement, especially as new technology comes along.
- Mr. Mullis asked if the Program will be integrated and analyzed in light of other regulatory process underway. Mr. Leland confirmed that it would be. Program development will consider contributions of waste from natural sources and other man-made sources besides agriculture. He added that additional staff from the Regional Water Board (i.e., Mr. Clayton Creager) will attend future meetings to present on the

program coordination activities taking place as part of the Klamath TMDL Action Plan (KTAP) (**see Action Item #6**).

- Participants noted that nutrient loads can benefit some aquatic species and wetlands.
- Participants discussed fertilizer application rates and possible risk levels associated with these rates. As discussed above, growers do not tend to over-apply due to the cost of fertilizer. Fertilizer industry representatives and the UC Cooperative Extension have extensive information on fertilizer/nutrient application rates and guidelines.
- Mr. Huffman noted that organic farming is improving the biology of the soil in the area and reducing nutrient loads. Between 10% and 25% of the existing acreage in production is organic. Participants noted that organic farming does not reduce nitrogen loads. Some organic practices such as pyrethroid use requires larger buffers than their traditional farming counterparts.
- Bill Eyne and Erica Terrance acknowledged the advances in growing practices to protect water quality. Ms. Terrence asked how much monitoring is happening currently at the farm level. Mr. Eyne responded that monitoring is being done. Members of the public added that it monitoring results need to be brought together- a cumulative summary does not exist at this time.
- Mr. St. John suggested that a tour of farming operations could be useful for Advisory Group participants and staff.
- Ms. Terrence asked how large a problem dissolved oxygen is in the area. Mr. Zabinsky responded that it is a large issue in Tule Lake, even for suckers. He acknowledged that at this time, Regional Board Staff may need to do more work on determining how much farm practices contribute to the problem (and conversely how much changes in practices can alleviate the issue). Cleaning up Tule Lake completely will not be a goal of the Program, since other sources of contamination besides agriculture exist.
- Ms. Terrence asked if the existing TMDLs provide information on natural sources of waste. Mr. Leland confirmed that they do. However, the TMDLs speak to overall nutrient load reduction, not just the reduction agriculture is responsible for.
- Mr. Coe noted that the size of an agricultural operation is not the determining factor for risk. It affects the volume of risk, but may actually pose a minimal threat to water quality if it has the financial resources to implement good BMPs. In some cases, small operations may pose a much greater risk because they can lack the knowledge and/or financial resources to reduce runoff and waste discharge.
- Participants asked if urban runoff is being addressed by this Program. Mr. Leland responded that this Program only addresses agriculture. Other programs, such as the municipal storm water program, address runoff from municipalities.
- Participants noted that the size of agricultural operations varies. Most are based around homesteads of 65-100 acres. Because these parcels are too small to be economically viable, many growers rent land. In some cases, the type of crop and operations vary from year to year as a result.
- Mr. Coe discussed the Program scope and suggested that the proposal to include all agricultural operations (excluding dry grazing and some other activities already covered by existing programs) being scaled back to only irrigated crop land. Participants noted that the scope of the Program is still unclear. Staff agreed to provide a draft Program scope definition at the next meeting (**see Action Item #7**).

- Meeting participants discussed a potential fee structure for the Program. Staff noted that the current fee schedule is set by the State Water Resources Control Board and is based largely on the Irrigated Lands Regulatory Program for the Central Valley. Staff acknowledged that this structure may need to be altered in the future. The existing fee schedule can be found online at http://www.swrcb.ca.gov/resources/fees/docs/fy1112fee_schdl_irigtd_lnds.pdf. Staff will provide a presentation and additional discussion on fees for the Program at future Advisory Group meetings (**see Action Item #8**).

Wrap Up, Action Items and Next Steps

Mr. Leland provided closing comments and thanked participants for attending. Ms. Terrence requested that meetings be scheduled as far in advance as possible. After closing comments, the Advisory Group adjourned.