BEFORE THE WATER RESOURCES DEPARTMENT OF THE STATE OF OREGON

In the Matter of the Water Management)	NOTIFICATION AND FINAL ORDER
and Conservation Plan for Klamath)	APPROVING WATER MANAGEMENT
Irrigation District, Klamath County,)	AND CONSERVATION PLAN
Oregon)	

Authority

OAR Chapter 690, Division 086, establishes the process and criteria for approving water management and conservation plans required under the conditions of permits, permit extensions and other orders of the Department.

Findings of Fact

- 1. The Klamath Irrigation District submitted a Water Management and Conservation Plan to the Department on March 3, 2003.
- 2. Public notice was published May 13, 2003 as required under OAR Chapter 690, Division 086. No comments were received during the 30 day comment period. On October 28, 2003 comments by the Bureau of Reclamation were received.
- 3. The Department reviewed the draft plan and comments. The Department outlined a work plan that included the items identified by the District and by the Department. If completed, according to the work plan, the management plan will satisfy the requirements of OAR 690-086-0140. The Department notified the Klamath Irrigation District of the areas needing additional work on March 24, 2005
- 4. The District agreed on March 29, 2005, to complete the activities described in the draft plan by March 29, 2010.
- 5. Pursuant to OAR 690-086-910(3), the Department reviewed the revised plan for consistency with OAR Chapter 690, Division 086 as adopted by the Water Resources Commission in 1994.
- 6. The final plan is generally consistent with the relevant requirements and includes a work plan as described in the Department's comments for completion of additional work necessary to satisfy the requirements within five years.

This is a final order in other than contested case. This order is subject to judicial review under ORS 183.484. Any petition for judicial review must be filed within the 60 day time period specified by ORS 183.484(2). Pursuant to ORS 536.075 and OAR 137-004-0080 you may either petition for judicial review or petition the Director for reconsideration of this order. A petition for reconsideration may be granted or denied by the Director, and if no action is taken within 60 days following the date the petition was filed, the petition shall be deemed denied. (Updated on 12/8/04)

Conclusion of Law

The water management and conservation plan with the inclusion of the work plan, submitted by Klamath Irrigation District is consistent with the criteria in OAR Chapter 690, Division 086.

Now, therefore, it is ORDERED:

- 1. The Klamath Irrigation District Water Management and Conservation Plan is approved and shall remain in effect until March 29, 2010, unless this approval is rescinded pursuant to OAR 690-086-0920.
- 2. The Klamath Irrigation District shall submit an updated plan meeting the requirements of OAR Chapter 690, Division 86 (effective November 1, 2002) within five years and no later than March 29, 2010.

Dated at Salem, Oregon this ninth day of May, 2005

Phillip C. Ward, Director

Appeals should be addressed to the attention of: Bill Fujii

Appeals deadline: August 9, 2005

Water Resources Department

Agricultural Water Management and Conservation Plan Review Worksheet

(OAR Chapter 690, Division 086)

Supplier:

Klamath Irrigation District

Reviewer:

Mary Grainey & Bill Fujii

Date:

October 2004/March 2005

OAR 690-086-0240 – System Description	
(1) General location of water right acreage, numbers of the associated water right certificates and permits and a description of relevant conditions of the water rights including the seasons of use and the uses of any other permitted withdrawals by the supplier;	The lands with in the District are all within the therefore part of the Klamath Adjudication. The plan identified but did not locate or quantify all the other Districts, private and water company lands served within the District.
	The Plan eluded to the various BOR contracts. A quantification of the number of acres for each contract would be helpful. The relative priority date of each of these contracts would be a useful set of data.
(2) Source(s) of water; storage and regulation facilities; and a summary of any transfer, rotation, exchange or intergovernmental cooperation agreements;	Klamath Lake, Klamath River, Lost River, and return flows from Klamath Project. Add discussion of water banking effects on delivery scheduling. In the discussion of the delivery system adding which irrigation district is served by the various drains and canals would be useful information.
(3) A schematic of the system showing storage and distribution facilities, drainage systems, measurement stations, generalized district boundaries, points of diversion and locations of major operational spills;	Figure 3 is very helpful especially identification of other district lands served by KID. Identification of all adjacent Districts would be useful as well since there are delivery constraints. It may be difficult to map KID / KBID lands. A map showing KID irrigation before the creation of KBID would

	be useful to support the discussion of the History of the District.
(4) Current water use, including peak and average annual diversions and, when available, water reuse and return flows;	74,395 acres irrigated lands probable within the system data on water delivered to other districts and tailwater returns from other districts points out the need for more control & measurement devices. There are a small number of privately held water rights with in the area that should also be investigated and integrated into the analysis. The estimate of 2.6 acre foot delivered is understandable but not verfiable.
(5) A summary of major classifications of user accounts showing water right acreages, the number of accounts of each classification, and the beneficial uses for which water is provided (irrigation, frost protection, temperature control, agricultural use, livestock, domestic, etc.);	Irrigation, livestock. Many small parcels 75% are on 5 acres or less. Quantification of the number of acres under each type of account would be useful.
(6) Types of on-farm irrigation systems common within the supplier's accounts;	Sprinkler & flood, need better estimate of # acres flood irrigated.
(7) A general characterization of crops commonly grown and the estimated average and peak consumptive use of the crops; and	The description on page 3 is vague. A table of major crop types and acres would be helpful.
(8) A description of the operation and maintenance program.	The brief description is sufficient for the purposes of this plan but does not recognize the significance of the amount of work the District performs to maintain and operate a complex system with many pumping stations, re-reg facilities, miles of pipe, various flumes, miles of drains and miles of canals.
OAR 690-086-0250 – Water Conservation Element	
(1) A progress report on the conservation measures scheduled for implementation in the water management and conservation plan previously	NA

approved by the Department, if any;	
(2) A description of the water supplier's agricultural water measurement program and a statement that the program complies with the measurement and reporting standards in OAR 690, Division 85, that a time extension or waiver has been granted, or that the standards are not applicable;	Is flow is measured at main diversions. At this time KID is not required to report under Division 85, because the water right not yet adjudicated. For a variety of reasons there is a need for significant improvement in measurement in many areas of the District (see water balance list below).
(3) A description of other conservation measures currently implemented by the water supplier;	Listed but not quantified on page 16.
(4) Short- and long-term goals of the water supplier to improve water management;	
(5) An evaluation of the opportunities for improving water use efficiency which includes:	
(a) A description of losses of water from canals, pipelines, and laterals, including any operational spills;	Extensive drainage system returns flows to Lost River
(b) An assessment of the extent to which water deliveries are insufficient to meet crop needs;	Estimate 2.6 Af/ac delivered. Not enough data to justify estimate. Need to estimate along each major canal, see attachment.
(c) A list of alternative conservation measures to reduce the losses of water identified in (a) of this subsection and address any insufficiencies of water deliveries identified in (b); and	Goal listed on Page one and page 20
(d) An assessment of existing and future alternatives to finance conservation measures including an analysis of the possibility of applying for the allocation of conserved water (OAR 690-018-0010 to OAR 690-018-0090).	Allocation of conserved water not applicable, would require a certificated water right
(6) For each of the following conservation measures not currently being implemented, an evaluation of whether implementation of the measure is feasible and appropriate for ensuring the efficient use of water and the prevention of waste:	
(a) Promotion of energy audits offered through local	Additional work is needed on this aspect of

electric utilities for district water users;	the plan, especially considering the status of power rates.
(b) Conversion to metered, pressurized deliveries to all parcels of one acre or less;	Cost estimates needed for urban areas
(c) Piping or lining earthen canals;	See (b) above; on Page 21 a section of the D canal through Malin is identifed
(d) Modifying distribution facilities and district policies to increase the flexibility of water deliveries;	See (b) above
(e) Provision of on-farm irrigation scheduling assistance;	Add
(f) Construction of re-regulating reservoirs;	Not described
(g) Adoption of rate structures that support and encourage water conservation;	Add.
(h) Each of the conservation measures listed in (5)(c);and any other conservation measures identified by the water supplier that would improve water use efficiency; and	
(i) Any other conservation measures identified by the water supplier that would improve water use efficiency.	
(7) A description and estimated schedule for implementation of each of the following conservation measures:	
(a) An information and education program aimed at improving the efficiency of use of water delivered. The program should address all types of uses served and include voluntary water use audits; and	The educational programs are listed on Page 17. It is a good list of some of the efforts some of the specifics on programs such as cooperation with the Klamath Water Users Association would be helpful to those unfamiliar with the basin. Many of the educational materials developed in various projects in California may be worth review by the District. The frequency and a description of the content of the newsletter eluded to

	should be added to any future descriptions.
(b) Any other conservation measures identified as feasible and appropriate under (6).	
(8) A program to monitor and evaluate the effectiveness of the conservation measures which are implemented.	Add.
OAR 690-086-0260 – Water Allocation/Curtailment Element	
(1) A description of the frequency and magnitude of past supply deficiencies and current capacity limitation. The description shall include an assessment of the ability of the water supplier to maintain delivery during drought or other source shortages.	Requires 5 year update, because of change in U.S.B.R. supply restrictions
(2) A description of the water supply situation(s) that cause the water allocation/curtailment element to be implemented, including identification of the supply situations which trigger warnings to users or public notice of impending shortage; and	Requires 5 year update
(3) A description of the procedure used to allocate water during water shortages.	Requires 5 year update, discuss water bank options
OAR 690-086-0270 – Water Supply Element	
(1) An estimate of the water supplier's long-range water demand projections for 20 years;	No expected to increase is described by the plan.
(2) A comparison of the projected water needs and the size and reliability of water rights permits or other current water supply contracts held by the water supplier;	Water bank options
(3) A list of potential sources of water, including conservation and reuse, to supply the long-range needs;	Complete. Reuse is maximized to the extent that salt balances need to be carefully monitored.
(4) A comparison among the potential sources of additional water considering costs, availability,	Update - 5 years

reliability, and likely environmental impacts;	
(5) An evaluation of the effects of the following factors on long-range water needs:	
(a) Regional options for meeting future water needs;	Klamath adjudication determines future options
(b) Urbanization and other land-use trends;	Need plan of action in 5 year update.
(c) Provisions in affected local governments' comprehensive plans relating to agricultural lands, urbanization, water resources, water supply, public facilities and services, and any other pertinent plan element or ordinance relating to uses or lands served, or to be served, under the long-term water supply plan.	Needs documentation
OAR 690-086-0225 – Additional Requirements	
(5) A list of the affected local governments to whom the plan water made available pursuant to OAR 690-086-0220 (6) and a copy of any comments on the plan provided by the local governments.	
(6) A date for submittal of an updated water management and conservation plan based on the schedule for implementation of conservation measures, any relevant schedules for other community planning activities, and the rate of growth of or other changes expected by the water supplier; or an explanation of why submittal of an updated plan is unnecessary and should not be required by the Department.	Recommend 5 years
December 3, 2003 - dp	

Table of Water Balances

for 5 consecutive years

A - Canal diversions from Klamath Lake

Deliveries - A Laterals

B-Canal

C-Canal

Enterprise Irrigation District

B - Canal

Pine Grove Irrigation District

E-Canal

F-Canal

F1-Canal

C - Canal

Add Klamath River from Lost River Diversion Channel

Reuse from Melhase Pumps

Miller Hill Pumps

#5 Pumps

Adams Pumps

Delivery to C4 Lateral

Other C Laterals

G-Canal

D1, D2 & D3 Canals

Van Brimmer Ditch Co.

J-Canal - Tulelake

G-Canal

Add Stukel Pumps

Delivery to G Laterals

D Canal

D-Canal

D Laterals

Shasta View Irrigation District

Malin Irrigation District

Tulelake Irrigation District

D1-Canal

D1 Laterals

Spill to Lost River

E-Canal

Add N Poe Valley Pumps

Delivery to E Laterals

Poe Valley Ditch

F-Canal

Add S Poe Valley Pumps

Delivery to F Laterals Spills to Lost River