



**OREGON WATER RESOURCE DEPARTMENT
WATER CONSERVATION, REUSE AND STORAGE
GRANT PROGRAM**

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WATER RESOURCES DEPT
SALEM, OREGON

I. Grant Information

Project Name: Planning study for the establishment of a water transaction program in the Upper Klamath Basin

Type of Grant Requested: Water Conservation Reuse Above Ground Storage
 Storage Other Than Above-Ground [Including Aquifer Storage and Recovery (ASR)]

Program Funding Dollars Requested: \$ \$71,500 Total cost of planning study: \$ \$151,239

Note: Request may not exceed \$500,000

II. Applicant Information

Applicant Name: <i>Klamath Basin Rangeland Trust</i>	Co-Applicant Name:
Organization: <i>Klamath Basin Rangeland Trust</i>	Organization:
Address: <i>700 Main St #201A</i> <i>Klamath Falls, OR 97601</i>	Address:
Phone: <i>541-273-2189</i>	Phone:
Fax: <i>541-850-8001</i>	Fax:
Email: <i>speterson@kbrt.org</i>	Email:

Fiscal Officer Name: <i>Molly Russell, Financial Manager</i>	Principle Contact: <i>Shannon Peterson, Executive Director</i>
Organization: <i>Klamath Basin Rangeland Trust</i>	Organization: <i>Klamath Basin Rangeland Trust</i>
Address: <i>700 Main St #201A</i> <i>Klamath Falls, OR 97601</i>	Address: <i>700 Main St #201A</i> <i>Klamath Falls, OR 97601</i>
Phone: <i>541-273-2189</i>	Phone: <i>541-273-2189</i>
Fax: <i>541-850-8001</i>	Fax: <i>541-850-8001</i>
Email: <i>mrussell@kbrt.org</i>	Email: <i>speterson@kbrt.org</i>

Certification:

I certify that this application is a true and accurate representation of the proposed work for a project planning study and that I am authorized to sign as the Applicant or Co-Applicant. By the following signature, the Applicant certifies that they are aware of the requirements of an Oregon Water Resources Department grant and are prepared to implement the project if awarded.

Applicant Signature: *Shannon Peterson* Date: 8/28/2008

Print Name: Shannon Peterson Title: Executive Director

III. Planning Study Summary

Please give a brief summary of the planning study using no more than 150 words.

KBRT will lead a planning study to design a water transactions program for the Upper Klamath Lake watershed. Previous modeling determined that an additional 30,000 acft of water needs to flow into the lake each year in order to balance fishery, agriculture, and Tribal needs around and downstream from the lake. KBRT will build upon existing data, short-term instream leases, and partnerships to develop a plan for a water transactions program to keep needed water instream and flowing to the lake. The National Fish and Wildlife Foundation currently administers a water transaction program in the Columbia Basin, and is interested in expanding their program to the Upper Klamath Basin. Other collaborators include the Oregon Water Resources Department, Klamath Watershed Partnership, Sustainable Northwest, and the Klamath Tribes. OWRD funds will be used to identify flow targets, develop an administrative transaction structure, a pricing framework, and a funding structure for the program

IV. Grant Specifics

Section A. Common Criteria

Instructions: Answer all questions in this section by typing the answer below the question. It is anticipated that completed applications will result in additional pages.

1. Describe how the planning study will be performed. Include:
 - a. A description of the planning schedule/timeline, which includes identifying all key tasks. (Section VI provides an opportunity for a “graphical” representation of the schedule.)

The planning and feasibility study will be completed over two years: 2009 through 2010.

Contractor selection: Assuming sufficient funding is secured, KBRT will request proposals from the two identified contractors and select one of them in early 2009.

Identify Program Options: Throughout 2009, KBRT and the contractor will work to complete the analysis of water savings as a result of existing transactions, and the economic impact on area ranches. Outreach to agricultural communities will be focused on the interest and feasibility of successfully implementing a water transaction program in the watershed. This will determine the tools (i.e. instream leasing, forbearance agreements, conserved water) that should be offered.

Determination of flow targets will be conducted, in conjunction with the Klamath Tribes, throughout 2009. Flow targets for the lake and specific reaches of tributaries to the lake will be based on completed and ongoing hydrologic modeling (Klamath Tribes and Klamath Water Users Association) and ODFW analysis.

Pricing analysis, based on previous Klamath Basin activities, including flow and ET data, and programs elsewhere in Oregon, will be conducted in late 2009 and early 2010.

Identification and communication with potential funders to develop a funding framework and preferred administrative structure will occur in late 2009 and early 2010.

With the feasibility analysis, pricing, funding, and program structure research completed by mid 2010, a draft plan will be released, reviewed, and a plan finalized by the end of 2010.

- b. When the planning study could begin.

January, 2009

2. Provide a description of the relevant professional qualifications and/or experience of the person(s) that will play key roles in performing the planning study. If the personnel have not been decided upon, include a description of the professional qualifications and/or experience of the person(s) you anticipate will play key roles in performing the planning study.

KBRT works closely with ranchers above Upper Klamath Lake (Fig 1, 2), encouraging the adoption of more sustainable land and water management practices, most notably a transition from flood irrigation to dryland grazing. This area is faced with over-allocation of water resources, and was identified by ODFW as high and highest priority for flow restoration (Fig 3). KBRT has engaged a number of short-term federal programs, including the USBR Water Bank and NRCS EQIP, to support ranchers through the initial economic losses encountered when first experimenting with dryland grazing. While there have been no direct payments to protect water rights instream, through these other programs KBRT has been able to file instream leases for over 36,000 acft of water each year (Fig 4). Over the past seven years, KBRT and partners have conducted rigorous scientific monitoring which assisted in the identification of priority areas and justification of real water savings

and quality improvements. KBRT's data collection and analysis is annually reviewed by either USGS or NRCS. KBRT is a recognized member of the instream leasing community in Oregon, even though there is not an established transaction structure in KBRT's area of focus. KBRT actually leases more water instream than any other private entity (Fig 5). KBRT is included in QLE gatherings of the Columbia Basin Transaction Program as well as OWRD events, including a seat at the instream leasing Rules Advisory Committee table. As such, KBRT has a strong relationship with and has learned much from groups with established transaction structures.

Shannon Peterson has served as Executive Director since early 2005 and is responsible for the administration and project management of KBRT. Ms. Peterson spent 3 prior years as KBRT's Project and Research Coordinator. She is the project lead in this effort and is responsible for all aspects of the project. Ms. Peterson has a BS in Environmental Sciences and a BA in Political Science from Mary Washington College, and is completing her Masters' Degree in Water Resources Management from Oregon State University. Ms. Peterson is the author of "Water Allocation During Scarcity: Reservoir Modeling and Drought Protection in the ACT Basin". Chapter 10 in Interstate Water Allocation in Alabama, Florida, and Georgia: New Issues, New Methods, New Models, J.Jordan and A.Wolf (Eds.) University Press of Florida, 2006. She has presented KBRT research at several conferences, including the 2006 American Geophysical Union's Fall Meeting (Dec 2006), for which she received the AGU Hydrology Outstanding Student Paper Award.

Molly Russell has served as KBRT's Financial Manager since February of 2008. She is a certified CPA and PFO, and spent 15 years as the Director of Accounting for the City of Spokane.

Potential contractors include Bruce Aylward of Ecosystem Economics LLC. Dr. Aylward has a PhD from Tufts University. He has served in a myriad of positions related to water marketing, including directing the Deschutes River Conservancy. Another potential contractor would be the firm WestWater Research. WWR is a foremost transaction and asset-valuation advisory company to the water sector. WWR specializes in water-asset sales and acquisitions, water resource economics, water right and asset appraisals, and project finance services. KBRT has discussed this effort with the potential contractors, but no decisions have been made.

3. What local, state or federal project permitting requirements/issues do you anticipate in order for the planning study to be conducted?

There are no permitting requirements as a part of the planning study. However, Oregon water law will play an important role in determining the outcome of the study, so we expect to work closely with Oregon Water Resources Department to assure the feasibility and legality of the final plan.

4. Are permits/governmental approvals required for the planning study? If yes, indicate whether you have obtained the necessary permits/governmental approval. If you have not obtained the necessary permits/governmental approval, describe the steps you have taken to obtain them.

There are no permits or approvals required for the planning study.

5. Describe your goal (which must be based on evaluating the feasibility of developing a water conservation, reuse or storage project) and how this study helps to achieve the goal.

The overall goal of this planning study is an operational water transaction program that will:

- Increase instream flows in the Fourmile Creek, Sevenmile Creek, Wood River, Williamson River, and Sprague River systems.

- *Improve water quality and increased flows into Upper Klamath Lake.*
- *Provide improved habitat for endangered sucker species, redband and bull trout and salmon populations in the tributaries and lake*
- *Benefit irrigators below the lake, such as the USBR Irrigation Project*
- *Benefit salmon populations and the fishing economy in the mainstem Klamath River*

A planning study to develop and test the feasibility of a water transaction program is the first step towards reaching the overall goal above. There have been short-term water marketing efforts, and short-term instream leases, but there is no established structure to support water transactions, which is the evident solution to providing the additional 30,000 ac ft of water needed in Upper Klamath Lake.

The specific goal for the planning study is to develop a feasible plan for implementing a water transactions program aimed at water conservation in the Upper Klamath Lake Watershed. The plan will include:

- 1. An established structure for a water transaction program available to residents of the upper Klamath Basin, focused on instream leasing, transfers, and conserved water.*
- 2. An established pricing framework for transactions in the upper basin that will provide for landowner needs while assuring economical water savings.*
- 3. An initial framework for the funding structure and potential funders identified and/or committed.*
- 4. Flow targets and identification and recruitment of priority and potential participants in the leasing program (expected goal of 30,000 acft delivered to the lake).*

6. Describe the technical aspects of the planning study and why your approaches are appropriate for accomplishing the goal of the planning study.

The planning study will aim to answer the following questions:

- 1. Is the Upper Klamath Lake watershed ready for a water transaction program, and is there sufficient interest and opportunity?*

This question will be answered with the assistance of an expert consultant with experience in successful transaction programs elsewhere in Oregon. The consultant will work in concert with groups active in the watershed, including KBRT, the Klamath Watershed Partnership, Sustainable Northwest, and the Klamath Tribes. The efforts that these groups are making in the basin will help judge the potential for a transaction program.

- 2. What are the flow targets in priority reaches of the targeted streams and into Upper Klamath Lake?*

This question will be answered by KBRT with the assistance of an expert consultant using work previously done by the Oregon Department of Fish and Wildlife, as well as modeling done by the Klamath Tribes and Klamath Water Users Association for the Klamath Settlement.

- 3. What is a appropriate approach (i.e. income capitalization or land price differential) to water pricing in the target area?*

This will be the main charge of the expert consultant. Much of the data needed to make the pricing determination is already in hand. The approach to developing a pricing structure will use data collected from KBRT's research on determining the "wet" water benefits of existing instream leases and the cost/benefit analysis of ranch operations when converting to dryland grazing. Additionally, the short-lived Bureau of Reclamation's bid-driven Water Bank has four years of data on pricing for different water saving activities. The consultant will combine this information about local conditions with experiences learned elsewhere in Oregon and the Western US.

4. What are potential options for a stable, long-term funding structure?

To develop a long-term, viable funding structure for the transaction program, KBRT will identify potential parties interested in purchasing water or supporting instream leases (i.e. USBR, PacifiCorp, private foundations). A special emphasis will be made on possible funding sources that might arise out of the Klamath Settlement agreements. KBRT will engage potential supporters with meetings, proposals, and involvement in the transaction structure and preferred funding structure (i.e. direct purchase, endowment, etc...). KBRT is currently involved in discussions regarding instream flow protection as related to the settlement, but has not yet seriously pursued funding opportunities.

7. Describe the level of involvement, interest and/or commitment of different entities associated with the planning study (attach letters of support). Describe how these entities will benefit or be impacted by the planning study.

Cooperators on this study include:

The National Fish and Wildlife Foundation. NFWF currently administers the Columbia Basin Water Transaction Program, and is interested in expanding their work to the Upper Klamath Basin. Familiar with KBRT's success with instream leasing, they approached KBRT to lead the effort and invited KBRT to submit a proposal. Final decision on the proposal will be made in November 2008. In addition to financial support, NFWF has offered to provide expert guidance and critical review of the planning effort.

Oregon Watershed Enhancement Board. KBRT has had several discussions with OWEB regarding this planning effort, and OWEB has expressed interest in supporting the effort, with an eye towards funding actual transactions in the future. KBRT is working closely with OWEB to submit a proposal for the November funding round.

Sustainable Northwest. SNW has been closely involved with the Klamath Settlement process, and the efforts to include the water users above Upper Klamath Lake in the Klamath Basin Restoration Agreement. They have a wealth of experience working with NFWF and a host of private foundations, and have agreed to assist in the planning effort, specifically in terms of a developing a stable funding structure.

Klamath Watershed Partnership. KWP is the watershed council for the Upper Klamath Lake Watershed, and are intimately involved in stream restoration efforts in the Sprague Basin, including the Settlement efforts. They have agreed to support the effort by contributing their knowledge about stream conditions and water users in the Sprague.

The Klamath Tribes. The Tribes have led the hydrologic modeling effort as part of the settlement talks that determined the need for an additional 30,000 acre feet flowing into the Upper Klamath Lake, and are currently working on flow targets in specific reaches of waterways entering the lake. They have agreed to assist the effort, specifically in the area of establishing flow targets.

Section B. Unique Criteria

Instructions: Answer the set of questions below that applies to the type of planning study that this grant will fund.

Water Conservation or **Reuse**

1. Water Conservation or Reuse projects that may result from this planning study are requested to be included in the Water Resources Department's "Inventory of Potential Conservation Opportunities". Though you may have already submitted this information earlier in the year through a separate survey, we ask that all applicants complete the information on the form provided at the end of this application.
 I have filled out the application or I have not filled out the application.

2. Describe the water supply need(s) that the project associated with the planning study is intended to meet. Applicant should reference supporting documentation that would be available upon request.

The entire Klamath Basin is under constant stress related to water quantity and quality issues, most recently highlighted by the irrigation water shutoff in 2001 and the massive salmon kill in 2002. The Klamath Basin is a flashpoint for water issues as agriculture, fishing, tribal, and endangered species interests are competing for over-allocated water. Almost every year there are struggles between agricultural and fisheries water needs. Instream flows in the Klamath Basin are of critical importance to several species of interest: Lost River and shortnose suckers, coho and Chinook salmon, Klamath River steelhead, redband rainbow trout, and bull trout.

Upper Klamath Lake is often the focal point of these struggles (fig 1). The US Bureau of Reclamation manages the lake to meet the needs of endangered sucker species in the lake, endangered salmon downstream, and irrigation on thousands of acres of farms and ranches. Additionally, the prime spawning ground for the endangered suckers is the Sprague River, which faces its own low flows and water quality issues, and is the Klamath Tribes priority waterway for restoration.

KBRT works closely with ranchers above Upper Klamath Lake, encouraging the adoption of more sustainable land and water management practices, most notably a transition from flood irrigation to dryland grazing. KBRT has engaged a number of short-term federal programs, including the USBR Water Bank and NRCS EQIP, to support ranchers through the initial economic losses encountered when first experimenting with dryland grazing. While there have been no direct payments to protect water rights instream, through these other programs KBRT has been able to file instream leases for over 36,000 acft of water each year (fig 2). However, these programs only support short-term instream protection.

There is a high level of urgency to assure that the beneficial management changes now temporarily implemented are made permanent. The importance of decreasing diversions is such that it has been possible to file instream leases without a formal transaction structure in place through short-term programs. This has allowed water rights to be protected for instream use on a year-to-year basis, and has allowed landowners to understand how their ranchers might operate with no or less irrigation. However, these short-term programs are set to end, and a permanent solution is now needed. In addition, the current status of the FERC relicensing of the Klamath River dams concludes that salmon passage must be restored to the Upper Basin, thus the basin need to be prepared to provide salmon habitat. Furthermore, the Draft Klamath Basin Restoration Agreement calls for 30,000 acre feet of water to be kept instream above the lake, and there is currently no structure to support this goal.

This planning effort will develop a program to address the need for instream flow protection not only to streams identified as “highest” and “high” priority for streamflow restoration by Oregon Department of Fish and Wildlife, but also provide much needed cold, clean water to Upper Klamath Lake. The program will benefit water quantities, water quality, endangered sucker and salmon species, Tribal interests, and basin irrigators.

Increasing instream flows / decreasing diversions has been identified as a priority in all plans focused on the upper basin, including the Hatfield Science Team 5 Year Plan (Wood River Matrix), the USFWS’ 2003 Lost River and Shortnose Sucker Recovery Plan (22, 56, 59-60), the US Geological Survey’s Review of the USBR 2004 Water Bank (39-40), the ODFW Oregon Plan for Salmon and Watersheds: Streamflow Restoration Priorities (Klamath Basin Section). The Upper Klamath Lake TMDL and WQMP (169, 172) identifies irrigated agriculture as a source of phosphorus and water temperature detriment above and in the lake, and describes the need for changes in the management of irrigation water. The basin-wide “Settlement” group recently released the Draft 11 Klamath Basin Restoration Agreement, which calls for the retirement of water rights in the upper basin to increase instream flows by 30,000 acft (Sec 16). The US Forest Service is currently completing the “Westside Watersheds Action Plan”, which identifies the need to increase connectivity and flows on private lands on streams with headwaters and protected habitat in the National Forest. KBRT’s work increasing instream flows has been highlighted in the 2006 Oregon Conservation Strategy (178) and the NRCS 2007 Klamath Basin Conservation Partnership Accomplishments report (3, 4, 7).

3. Explain how the associated project will mitigate the need to develop new water supplies and/or use water more efficiently. Reference documentation and/or examples of the success of similar or comparable water conservation/reuse projects that would be available upon request.

The final outcomes of this planning project are:

1. *Increased instream flows and streams protected from cattle activity in the Fourmile Creek, Sevenmile Creek, Wood River, Williamson River, and Sprague River systems.*
2. *Improved water quality and increased flows into Upper Klamath Lake.*
3. *A functional water transaction program that will:*
 - *provide improved habitat for endangered sucker species, redband and bull trout and salmon populations in the tributaries and lake*
 - *benefit irrigators below the lake, such as the USBR Irrigation Project*
 - *benefit salmon populations and the fishing economy in the mainstem Klamath River.*

These outcomes will help reach the water balance in the upper Klamath Basin, following the modeling work done by the Klamath Tribes and the Klamath Water Users Association, as expressed in the Klamath Basin Draft Restoration agreement. The danger of not reaching the water balance is a continuation of the status quo, where either critical fisheries or the agricultural community are damaged due to the over-allocation of water resources.

Water markets are a frequently used tool in the arid western United States. The plan for the water transaction program will follow the example set by the Columbia Basin Water Transaction Program, and other transaction approaches used by Oregon Water Trust, Deschutes River Conservancy.

4. Explain how the project associated with the planning study will meet the water supply need(s), and indicate what percentage of that need will be met. (For example: If your water supply need is 20,000

acre-feet of additional water and the project will supply 10,000 additional acre-feet, 50% of your need will be met).

Based on the water balance work done for the Klamath Basin Restoration Agreement, there is an initially identified need for an additional 30,000 acre feet of water flowing into Upper Klamath Lake. The Klamath Tribes are identifying flow targets in priority reaches above the lake in the Sprague, Williamson, and Wood River subbasins.

The planning effort will work with these targets, and re-evaluate the flow needs in cooperation with the Klamath Tribes. The project will aim to meet the flow targets ... 100% of the needed water. However, a part of the plan is to determine if it is feasible to supply 100% of the needed water through water transactions, and if not, what percentage might be met.

5. Provide data and information on the associated project and the project's sources of water supply:
 - a. The location of the associated project. (Include the basin, county, township, range and section.)
Upper Klamath Lake watershed, Klamath County, T 32-36; R 8-15 (a large rectangle)
 - b. The name(s) and river mile(s) of the source water and what they are tributary to, if applicable.
Tributaries to upper Klamath Lake: Sprague River (all miles), Williamson River (all miles), Wood River (all miles), Sevenmile Creek (all miles), Fourmile Creek (all miles)
 - c. Environmental flow needs and water quality requirements of supply source water bodies and water bodies downstream of associated and/or affected return flows.

According to modeling work done by the Klamath Tribes and Klamath Water Users Association, Upper Klamath Lake needs an additional 30,000 acft of inflow to meet ecological and agricultural needs. The Tribes are currently determining flow needs in specific stream reaches to support a healthy fishery. ODFW has identified the target streams as high and highest priority for flow restoration, but do not have specific targets. Part of the planning effort will review existing information determining flow needs (for both quantity and quality) above and into Upper Klamath Lake.

- d. Reliance on return flows by downstream water right holders.

There is varying reliance on return flows by downstream water right holders in the project area ... it is a very site specific consideration. This question will be addressed on a broad scale in the planning effort, but will be more closely considered during evaluation of individual transactions.

V. Match Funding Information

Applicants must demonstrate a minimum dollar-for-dollar match based on the total funding request. The match may include a) secured resources, b) previously expended resources, and/or c) pending resources. For secured funding, you must attach a letter of support from the match funding source that specially mentions the dollar amount shown in the "Amount/Dollar Value" column. For pending resources, documentation showing a request for the matching funds must accompany the application. For resources that have been previously expended, the expenditure must have occurred on or after July 1, 2005. Resources expended prior to July 1, 2005 are not eligible for match purposes.

The Type of matching funds may include:	The Status of matching funds may include:
<ul style="list-style-type: none"> The value of in-kind labor, equipment rental and materials essential to the planning study provided by the applicant or partner*. 	<ul style="list-style-type: none"> Secured funding commitments from other sources.
<ul style="list-style-type: none"> Cash is direct expenditures made in support of the planning study by the applicant. 	<ul style="list-style-type: none"> Associated and documented expenditures for the planning study from non-program sources incurred on or after July 1, 2005.
	<ul style="list-style-type: none"> Pending commitments of funding from other sources. In such instances, Department funding will not be released prior to securing a commitment of the funds from other sources. Pending commitments of the funding must be secured within 12 months from the date of the award.

*"Partner" means a non-governmental or governmental person or entity that has committed funding, expertise, materials, labor, or other assistance to a proposed planning study. OAR 690-600-0010.

Match Funding Source (if in-kind, briefly describe the nature of the contribution)	Type (✓ One)	Status (✓ One)	Amount/ Dollar Value	Date Match Funds Available (Month/Year)
<i>National Fish & Wildlife Foundation</i>	<input checked="" type="checkbox"/> cash <input type="checkbox"/> in kind	<input type="checkbox"/> secured <input type="checkbox"/> expended <input checked="" type="checkbox"/> pending	\$52,000	November 08
<i>Oregon Watershed Enhancement Board</i>	<input checked="" type="checkbox"/> cash <input type="checkbox"/> in kind	<input type="checkbox"/> secured <input type="checkbox"/> expended <input checked="" type="checkbox"/> pending	\$27,739	April 08
	<input checked="" type="checkbox"/> cash <input type="checkbox"/> in kind	<input type="checkbox"/> secured <input checked="" type="checkbox"/> expended <input type="checkbox"/> pending		
	<input type="checkbox"/> cash <input type="checkbox"/> in kind	<input type="checkbox"/> secured <input type="checkbox"/> expended <input type="checkbox"/> pending		
	<input type="checkbox"/> cash <input type="checkbox"/> in kind	<input type="checkbox"/> secured <input type="checkbox"/> expended <input type="checkbox"/> pending		
	<input type="checkbox"/> cash <input type="checkbox"/> in kind	<input type="checkbox"/> secured <input type="checkbox"/> expended <input type="checkbox"/> pending		
	<input type="checkbox"/> cash <input type="checkbox"/> in kind	<input type="checkbox"/> secured <input type="checkbox"/> expended <input type="checkbox"/> pending		
	<input type="checkbox"/> cash <input type="checkbox"/> in kind	<input type="checkbox"/> secured <input type="checkbox"/> expended <input type="checkbox"/> pending		
	<input type="checkbox"/> cash <input type="checkbox"/> in kind	<input type="checkbox"/> secured <input type="checkbox"/> expended <input type="checkbox"/> pending		

VI. Project Planning Study Schedule

Estimated Project Duration: January 1, 2009 to December 31, 2010

Place an "X" in the appropriate column to indicate when each element (key task) of the project will take place.

Project Planning Study Element (Key Tasks)	2009				2010				2011 & Beyond
	1 st Qtr	2 nd Qtr	3 rd Qtr	4 th Qtr	1 st Qtr	2 nd Qtr	3 rd Qtr	4 th Qtr	
<i>RETAIN CONSULTANT</i> <i>KBRT will request proposals from and select a consulting party.</i>	X								
<i>IDENTIFY WATER TRANSACTION PROGRAM OPTIONS</i> <i>KBRT & the consultant will determine what tools the transaction program should offer (i.e. instream leases, forbearance, conserved water) based on community interest & Oregon water law. Judge the feasibility of and interest in various options.</i>		X	X	X					
<i>IDENTIFY FLOW TARGETS</i> <i>Building on completed and ongoing modeling efforts and ODFW analysis, determine flow targets for the lake itself, and specific reaches of tributaries to the lake.</i>		X	X	X					
<i>COMPLETE PRICING ANALYSIS</i> <i>Using existing flow and ET data related to current instream leases, economic analysis of ranches converting to dryland grazing, pricing revelation based on the short-lived USBR Water Bank bid process, determine an effective, efficient pricing structure for the transaction program.</i>		X	X	X	X				
<i>DETERMINE FUNDING STRUCTURE OPTIONS</i> <i>Identify parties potentially interested in water purchases (i.e. USBR, PacifiCorp, private foundation, conservation groups). Engage them in the planning effort and determine options for funding structure.</i>			X	X	X	X			
<i>DETERMINE PROGRAM STRUCTURE & ADMINISTRATION</i> <i>Based on all information & analysis, and working with partners, determine an overall program and administration structure.</i>					X	X			
<i>FINAL REPORT</i> <i>Complete draft report for review by early-mid 2010, final report by end of 2010</i>							X	X	
<i>POST-PLANNING STUDY IMPLEMENTATION</i> <i>Implement pilot program ... then, with funding established, permanent program.</i>									X

VII. Project Planning Study Budget

Section A

Please provide an estimated line item budget for the project planning study. An example would include: labor, materials, equipment, contractual services and administrative costs.

Line Items <i>Note: Administrative costs may not exceed 10% of the total funding requested by the Department.</i>	Unit Number (e.g. # of hours)	Unit Cost (e.g. hourly rate)	In-Kind Match	Cash Match Funds	OWRD Grant Funds	Total Cost
PERSONNEL <i>KBRT staff for project oversight and management, analysis of feasibility, flow targets, pricing, and funding in conjunction with contractor, community outreach Also includes completion of economic analysis with NRCS.</i>	1040	\$42.00		\$18,680	\$25,000	\$43,680
CONTRACTUAL SERVICES <i>Experienced consultant to produce final plan = 640 hrs Legal advice related to water law = 160 hrs</i>	800	\$100.00		\$40,000	\$40,000	\$80,000
TRAVEL <i>10 roundtrips K Falls - Portland. Airfare or mileage, hotel, per diem : \$580/trip = \$5800 24 roundtrips K Falls - Sprague River. 105 miles each @ \$0.50 = \$1260</i>	as described	\$7,060.00		\$7,060		\$7,060
SUPPLIES / MATERIALS <i>Postage, communications, report production, various</i>	as described	\$6,750.00		\$6,750		\$6,750
Administrative Costs				\$7,249	\$6,500	\$13,749
Total for Section A				\$79,739	\$71,500	\$151,239
Percentage for Section A				53%	47%	100%

Section B

If Grant amount requested is \$50,000 or greater, you MUST complete Section B. Elements (key tasks) in Section B should be the same as the elements (key tasks) in Section VI (Project Planning Study Schedule).

Request to be added to the Oregon Water Resources Department's
Inventory of Potential Conservation Opportunities

The purpose of this inventory is to catalogue potential conservation projects that water users themselves have identified but not yet pursued because of financial, institutional, or other barriers. For the purpose of this application, water storage other than above-ground are included as conservation opportunities and are most likely capital conservation projects.

As a water provider or user, you know your water demands and water conservation opportunities better than anyone. We would appreciate your assistance with this important data collection effort by completing this survey. Your participation will help provide the building blocks we need to begin to identify and achieve potential future water supplies. Please answer the questions as completely as possible, to the best of your ability. We appreciate your help with this important effort.

This inventory of already-identified, potential conservation projects includes both capital and programmatic projects. Capital projects are defined as one-time, large investments resulting in water savings. Examples include reclaimed water plants, reservoir covering, transmission line upgrades reducing leaks, or industrial engineering modifications to re-use process water. Programmatic projects are defined as ongoing investments resulting in water savings. Examples include facilitating upgrades to more efficient water using devices (e.g., distributing free showerheads, toilet rebates) and distribution system leak detection programs. The conservation inventory is primarily intended to include "planned" projects rather than projects that are currently being implemented. However, currently active programmatic projects may be listed if they will continue or expand in future years. The inventory of projects submitted will be compiled by county or basin.

Examples are provided below.

	Example Capital Conservation Project	Example Programmatic Conservation Project
Project Description Provide brief sentence	Line 3 miles of unlined ditch.	Toilet rebate program for residential customers
Estimated Future Savings Provide brief sentence, including information regarding savings seasonality.	20 acre feet of water per year	If we spend our full budget each year, we estimate 50,000 gallons of water save per year
Seasonality Indicate what part of the year savings are generated (e.g. year-round; summer only; etc.).	Peak (irrigation) season savings.	Savings should occur throughout the year.
Estimated Future Costs Provide brief sentence.	\$500,000 total project costs.	\$40,000 a year.
Implementation Schedule Provide brief sentence.	Not set. Have conducted cost and savings estimate, but still seeking funding.	We started the program in 2005 and plan to implement until 2015.
Project Funded? Designate either "yes", "no", or provide brief sentence if necessary	No. Pursuing grant funding.	Yes. IN our CIP through the next 5 years.

To add a project to the inventory of potential conservation opportunities, please provide the following information for each conservation project.

This is a <input type="checkbox"/> Capital Conservation Project <input checked="" type="checkbox"/> Programmatic Conservation Project	
Project #/Name	Water Transaction Program for the Upper Klamath Lake Watershed
Project Description	The establishment of an effective water transaction program in the Upper Klamath Lake Watershed with stable-long, term funding aimed at providing increased flow to the Lake, meeting the water balance needed to support ecological and agricultural needs.
Estimated Future Savings	Current goal at 30,000 acre feet.
Seasonality	Flow targets developed for the irrigation season, April - October.
Estimated Future Costs	Unknown ... estimates are still being figured, but a current approach estimates \$20M for a perpetual endowment.
Implementation Schedule	Two year planning study (through 2010), pilot implementation (through 2013), establishment of perpetual program (2013).
What are the barriers to implementation, e.g. funding?	A complete planning and feasibility study to determine the transaction program structure, a stable, long-term funding source, ongoing political and social issues surrounding the Klamath Settlement.
This is a <input type="checkbox"/> Capital Conservation Project <input type="checkbox"/> Programmatic Conservation Project	
Project #/Name	
Project Description	
Estimated Future Savings	
Seasonality	
Estimated Future Costs	
Implementation Schedule	
What are the barriers to implementation, e.g. funding?	

- Include this form with your application -

Figure 1. The Klamath Basin, Oregon and California

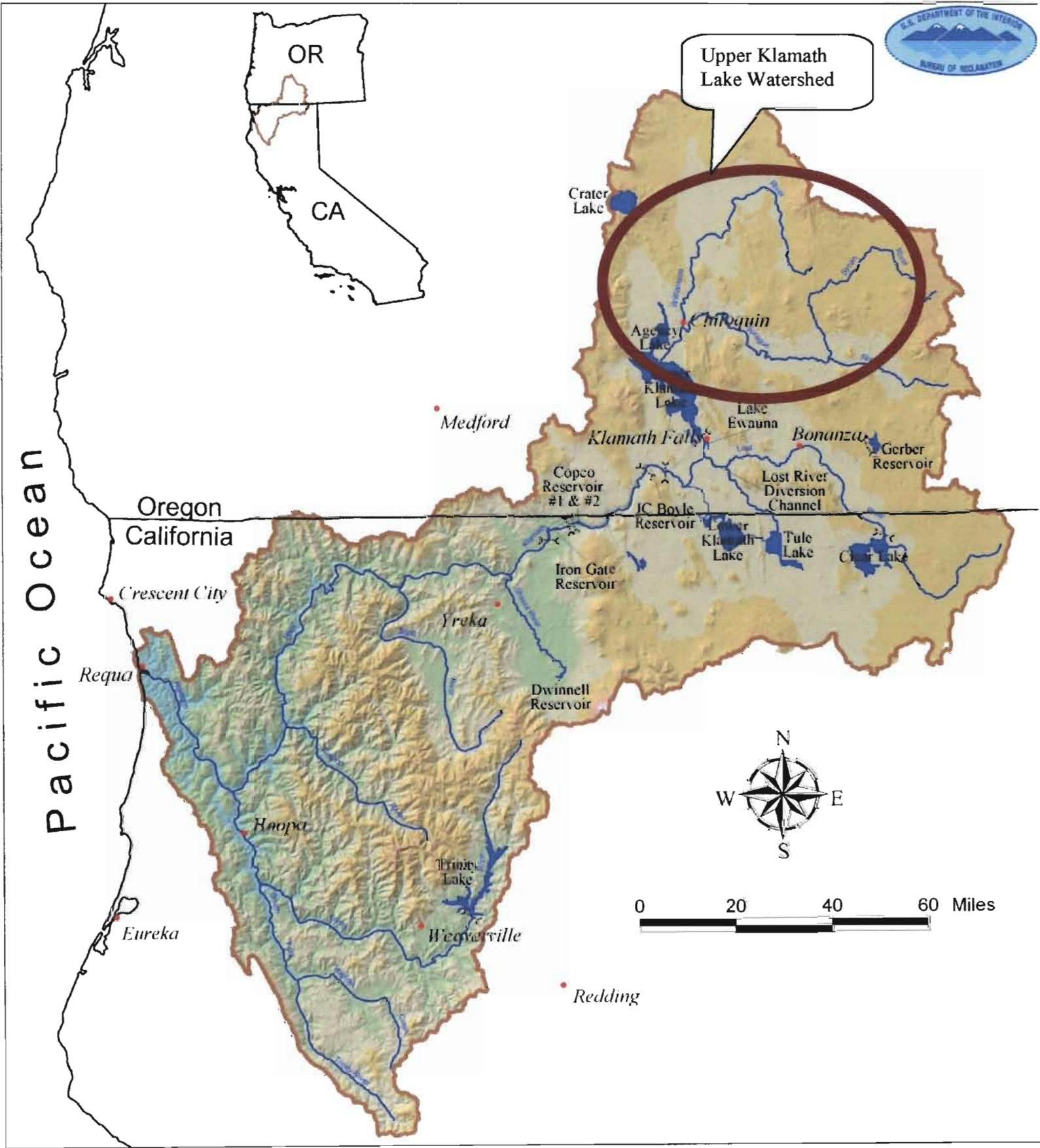


Figure 2: Project area, Upper Klamath Lake Watershed

The Water Transaction Program would include the extent of the drainage, but with a special focus on the Upper Klamath Lake area and Sprague River Drainages

Focus areas include Ranges 8-14 in Townships 32-36

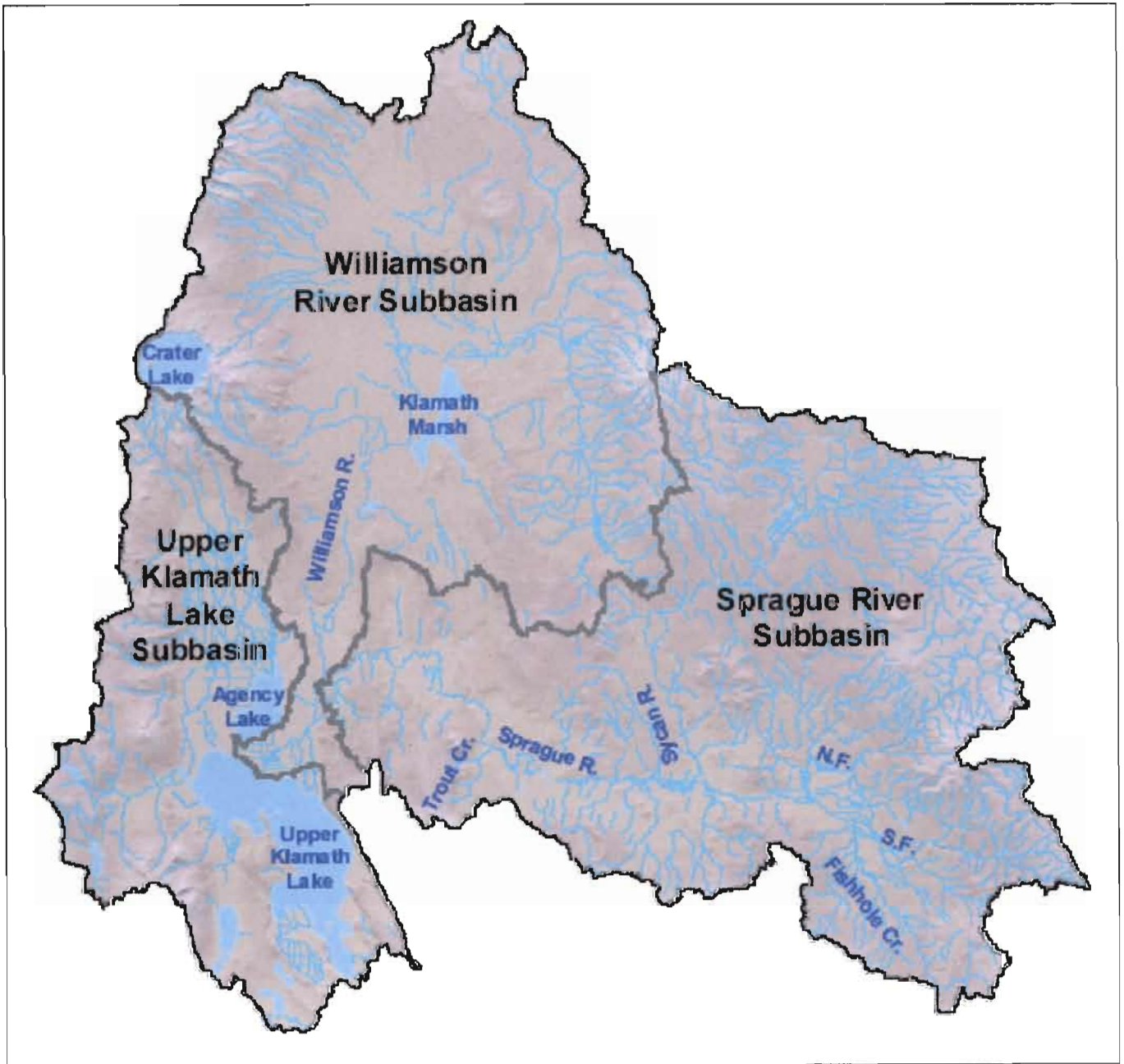


Figure 3. ODFW flow restoration priorities

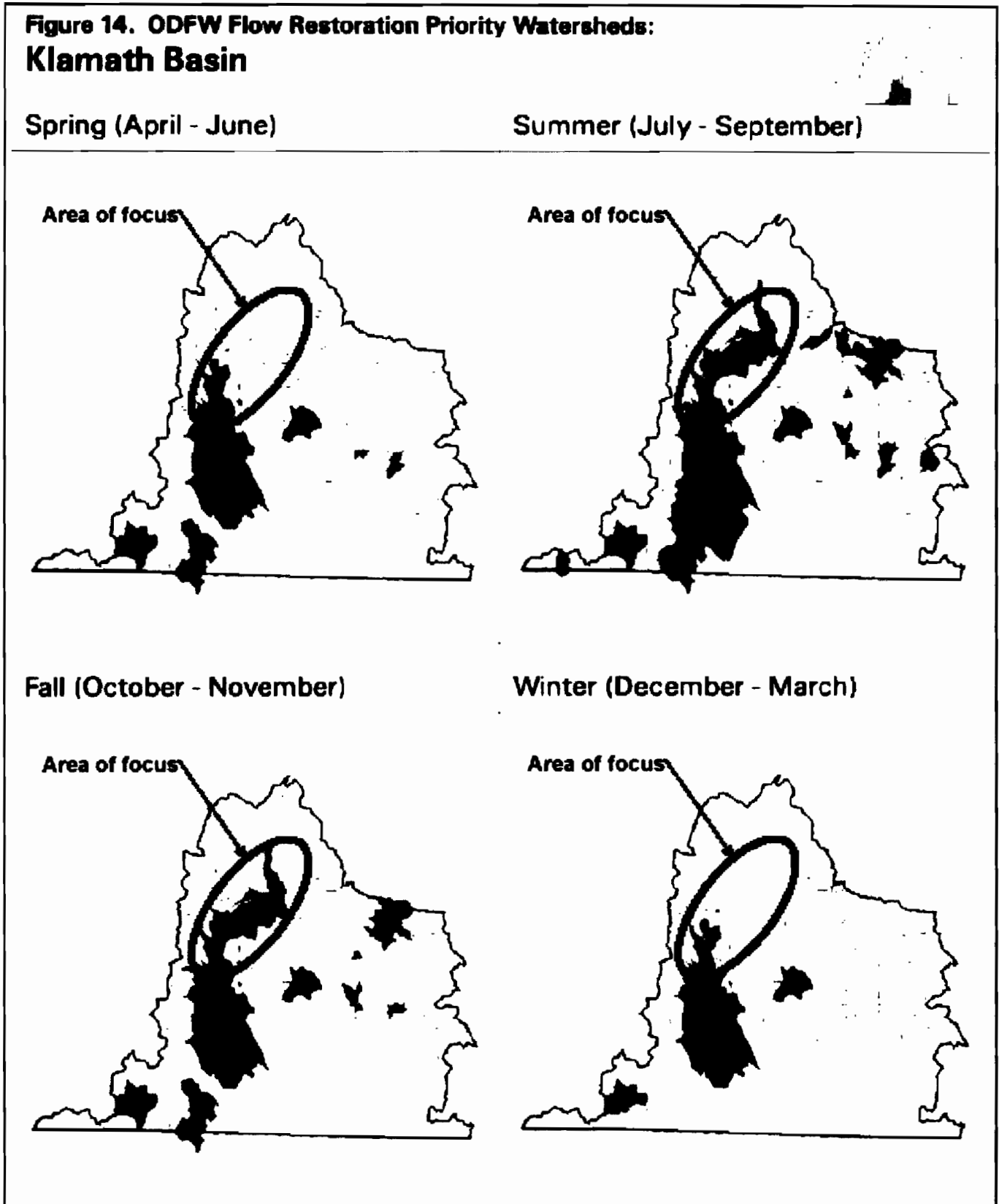


Figure 4

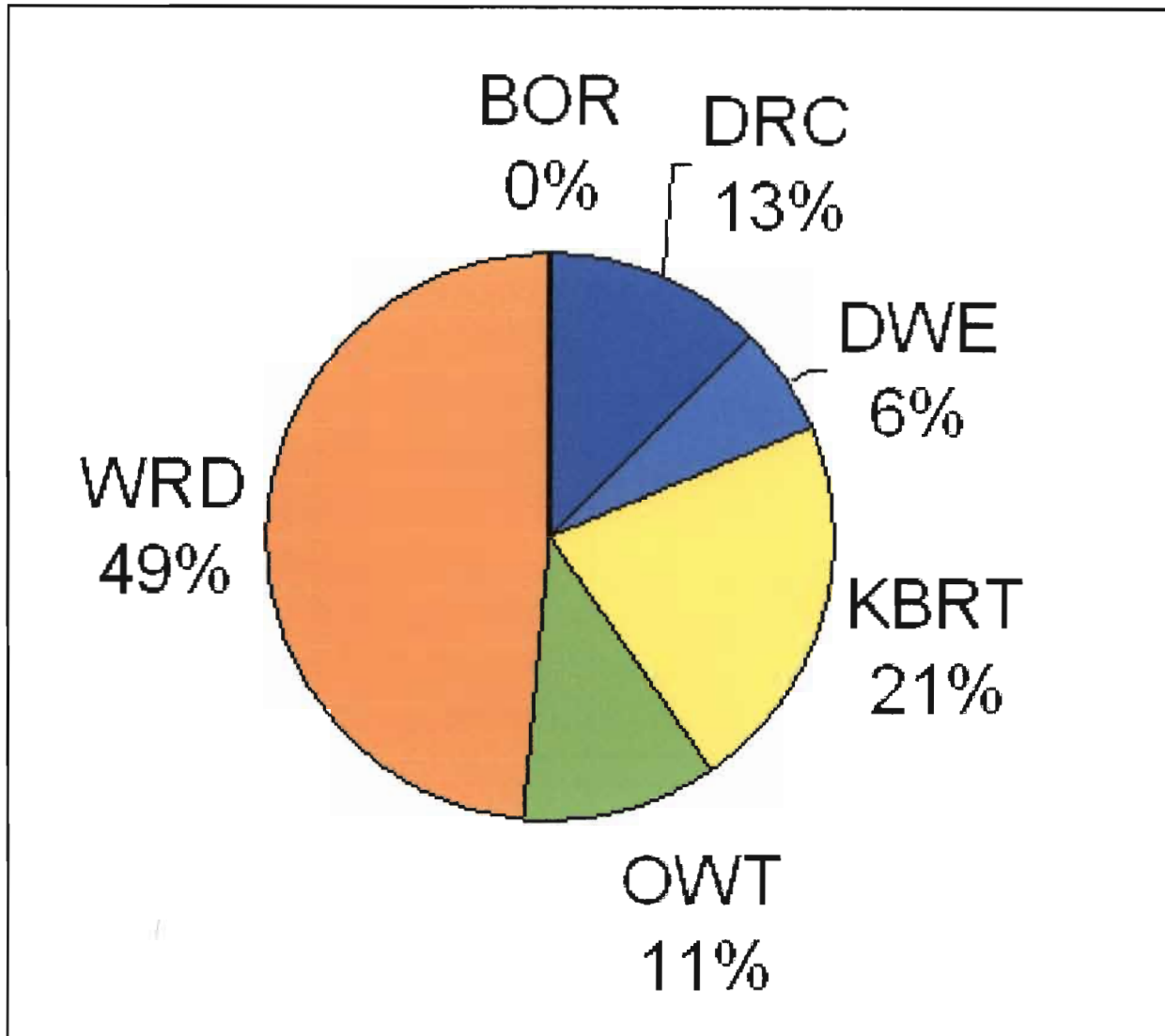
**Current KBRT
instream leases**

Total cfs: 161.32
Total acft: 36.409.23
Total gal: 11,859,695,034

Soures: OWRD

lease	cert	name	Acquisition	Expiration	flow cfs	gal	acft
479	8879	SEVENMILE CR	04/01/2006	09/30/2008	1.35	159873358.00	480.20
479	10600	SEVENMILE CR	04/01/2006	09/30/2008	9.91	1171529328.80	3588.80
479	10601	SEVENMILE CR	04/01/2006	09/30/2008	0.37	43407497.52	133.26
479	10601	SEVENMILE CR	04/01/2006	09/30/2008	2.08	245778891.68	754.54
479	42822	SEVENMILE CR	04/01/2006	09/30/2008	1.00	118278580.00	383.11
572	10828	CRANE CR	05/17/2007	10/01/2007	1.89	187351637.80	513.77
572	10828	SEVENMILE CR	05/17/2007	10/01/2007	1.30	115106592.00	353.98
572	10829	MARES EGG SPRING	05/17/2007	10/01/2007	9.80	887749232.00	2883.98
572	10829	SEVENMILE CR	05/17/2007	10/01/2007	0.03	2833468.88	8.70
574	42834	WOOD RIVER	08/23/2004	10/31/2008	22.98	1024817918.40	3148.19
574	42935	CROOKED CR	08/23/2004	10/31/2008	0.06	2875764.80	8.21
574	42935	CROOKED CR	08/23/2004	10/31/2008	1.21	53981258.80	165.06
574	42935	FORT CR	08/23/2004	10/31/2008	0.24	10703059.20	32.86
574	42935	FORT CR	08/23/2004	10/31/2008	4.81	214507144.80	658.54
574	42936	WOOD RIVER	08/23/2004	10/31/2008	14.04	628128963.20	1922.22
574	85388	AGENCY SPRING	08/23/2004	10/31/2008	0.68	30325334.40	93.10
577	27811	FOURMILE CR	05/17/2007	10/01/2007	2.10	185848264.00	570.88
585	3579	SEVEN MILE CR	08/02/2007	10/31/2007	0.34	19486548.00	59.82
585	10912	SEVEN MILE CR	08/02/2007	10/31/2007	1.17	68057498.00	208.94
585	10929	SEVEN MILE CR	08/02/2007	10/31/2007	1.07	62240818.00	191.08
585	27657	ANNIE CR SLOUGH DRAIN	08/02/2007	10/31/2007	1.29	75037752.00	230.37
585	42581	WOOD R	08/02/2007	10/31/2007	5.98	347849424.00	1087.90
585	42582	ANNIE CR SLOUGH	08/02/2007	10/31/2007	1.20	69802560.00	214.28
585	42582	FOUR MILE CR	08/02/2007	10/31/2007	3.40	197773920.00	607.17
585	42582	SEVEN MILE CR	08/02/2007	10/31/2007	5.30	308294640.00	946.46
585	42583	WOOD R	08/02/2007	10/31/2007	8.59	499868992.00	1533.98
585	80891	SEVEN MILE CR	08/02/2007	10/31/2007	3.39	197192232.00	605.38
680	1091	ANNA CR	05/18/2007	10/31/2007	1.88	182417358.80	580.02
680	1094	ANNA CR	05/18/2007	10/31/2007	0.43	46890158.80	143.34
680	1108	ANNA CR	05/18/2007	10/31/2007	1.26	136813017.80	420.02
681	24589	CHERRY CR	07/13/2007	09/30/2007	0.39	19913119.20	61.13
681	24589	TIGER LILLY SPRINGS	07/13/2007	09/30/2007	0.04	2042371.20	6.27
681	31084	WATER	07/13/2007	09/30/2007	1.37	89951213.60	214.75
682	8261	BLUE SPRINGS	05/17/2007	09/30/2007	2.00	175798040.00	539.70
682	8262	BLUE SPRINGS	05/17/2007	09/30/2007	2.00	175798040.00	539.70
682	10036	BLUE SPRINGS	05/17/2007	09/30/2007	2.25	197773920.00	607.17
682	10036	BLUE SPRINGS	05/17/2007	09/30/2007	2.49	218868904.80	671.93
682	10895	SEVENMILE CR	05/17/2007	09/30/2007	2.30	202168896.00	620.86
682	10895	SEVENMILE CR	05/17/2007	09/30/2007	2.30	202168896.00	620.86
682	10907	SEVENMILE CR	05/17/2007	09/30/2007	1.16	101983443.20	313.03
682	10910	SEVENMILE CR	05/17/2007	09/30/2007	2.33	204805981.60	628.75
682	10918	SHORT CR	05/17/2007	09/30/2007	3.85	338413152.00	1039.93
682	10919	UNNAMED SPRINGS	05/17/2007	09/30/2007	0.50	43849760.00	134.93
682	10920	SPRINGS	05/17/2007	09/30/2007	1.89	166130092.80	510.02
682	10921	SEVENMILE CR	05/17/2007	09/30/2007	2.48	216232819.20	663.83
682	10923	SEVENMILE CR	05/17/2007	09/30/2007	2.38	209200857.60	642.25
682	10924	SEVENMILE CR	05/17/2007	09/30/2007	6.32	555524968.40	1705.46
682	28201	BLUE SPRINGS	05/17/2007	09/30/2007	0.04	3515980.80	10.79
682	28201	SEVENMILE CR	05/17/2007	09/30/2007	0.13	11428937.60	35.08
682	34958	UNNAMED DRAIN	05/17/2007	09/30/2007	1.74	152845164.80	489.54
695	7841	ANNIE CR	08/05/2006	10/31/2008	0.34	32522822.40	99.85
695	7841	ANNIE CR	08/05/2006	10/31/2008	0.54	51175817.80	157.11
695	45299	ANNIE CR	08/05/2006	10/31/2008	0.21	19808348.80	60.20
695	45299	ANNIE CR	08/05/2006	10/31/2008	2.10	200878258.00	618.88
695	53000	ANNIE CR	08/05/2006	10/31/2008	1.20	114788432.00	352.98
695	53001	ANNIE CR	08/05/2006	10/31/2008	1.34	127988871.68	382.92
695	67090	ANNIE CR	08/05/2006	10/31/2008	0.03	2391384.00	7.34
695	67090	ANNIE CR	08/05/2006	10/31/2008	2.78	286304522.24	817.55
695	80582	ANNIE CR	08/05/2006	10/31/2008	0.33	31279302.72	98.03
695	80583	ANNIE CR	08/05/2006	10/31/2008	2.84	271881222.40	834.00
817	10927	SEVENMILE CR	05/31/2007	10/01/2007	1.00	80143880.00	248.04
817	10928	SEVENMILE CR	05/31/2007	10/01/2007	0.75	60107760.00	184.53
817	10928	SEVENMILE CR	05/31/2007	10/01/2007	0.25	20035880.00	61.51
817	10928	SPRINGS AND CRANE CR	05/31/2007	10/01/2007	0.75	60107760.00	184.53
TOTAL					161.32	11,859,695,034	36,409.23

Figure 5. 2007 State of Oregon Instream Lease Restoration (based on cfs) by Organization



Source: OWRD presentation to Qualified Leasing Entities, December 2007

KLAMATH WATERSHED PARTNERSHIP

700 Main St Suite 202 Klamath Falls OR 97601

Phone (541) 850-1717 Fax (541) 850-8001

August 28, 2008

Shannon Peterson
Klamath Basin Rangeland Trust
700 Main St #210A
Klamath Falls, OR 97601

RE: Support for the effort to establish a water transaction program in the upper Klamath Basin

To Whom It May Concern:

I am writing to express our profound support for the *Establishment of a Water Transaction Program in the Upper Klamath Basin* proposal that KBRT is submitting to the Oregon Water Resources Department.

The work that KBRT has done in the Wood River Valley to keep irrigation water instream, increasing stream flow and delivering more and better quality water to Upper Klamath Lake, is a major step towards reaching a balance in water use in the upper Klamath Basin. KBRT's work demonstrates that there are ways to protect water instream while maintaining agricultural operations.

The Klamath Watershed Partnership is very active in the Sprague Basin, and is prepared to work with KBRT to develop creative ways to bring water transactions to the Sprague, where instream flow is a critical need to support endangered sucker fish populations.

This proposal is especially timely in light of the recently released *Klamath Basin Restoration Agreement*, which calls for an additional 30,000 acre feet of water to be protected instream above Upper Klamath Lake. A formal transaction program is essential to reach this goal.

Looking forward to our partnership,



Terry Morton
Executive Director