Water Supply Options: Market-Based Approaches

Market-Based Approaches use price incentives to promote efficient water use and reallocation of supply.

Tools assessed include:

- Temporary lease of water rights: fallowing acres on an annual basis
- Voluntary duty reduction: incentives to reduce water use per acre
- Permanent sale of water rights: moving irrigation water rights permanently off acres

Water supply generated can move from farm to farm, or farm to river

Scale and Cost of Opportunity

Approximately 164,000 acre-feet may be available through market-based approaches (Total \$65 M, average \$398/AF)

The study identified a range of prices at which some water users are willing to lease/ sell water. Generally, price increases as the volume of water needed increases.



Benefits

- The study suggests that water is available now at relatively low-cost
- Temporary tools are flexible and can be scaled in dry years

Challenges

- District operational issues ("carry water") associated with leasing/transferring larger quantities of water may limit this tool's viability in certain places.
- Districts would need to develop new policies and programs to optimize these options
- Costs may increase due to the need to coordinate with multiple private parties

The Study will not recommend, propose, or endorse any particular action. It will Important **Note:** Assess the general potential for market-based approaches to generate water supply for possible consideration during future water resource planning by stakeholders.



Water Leasing Voluntary Duty Reduction



Ch	art Area	
Cubic Feet per Second	110	-
	100	-
	90	
	80	-
	70	-
	60	-
	50	
	40	-
	30	-
	20	
	10	
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A Proven Tool for Restoring Flows in the Deschutes

Water markets have contributed significantly to restored streamflows in the Middle Deschutes River below Bend.



Deschutes Basin Flows Restored Through Water Markets 2002-2017

Overview of Tools

ter Supply Tool	Supply (AF)	Total Cost	Avg \$/A
ater Conservation Frastructure	200,000	\$986 M	\$4,930
arket-Based Incentives	164,000	\$65 M	\$398
orage	40,000	\$200 M	\$5,000



