RECLAMATION Managing Water in the West

ODESSA SUBAREA SPECIAL STUDY

Columbia Basin Project

STUDY UPDATE April 2006

Study Background

The Odessa Subarea Special Study involves investigation of continued development of the Columbia Basin Project through delivery of project water to lands currently using ground water in the Odessa Ground Water Management Subarea (Odessa Subarea). The aquifer is declining to such an extent that the ability of farmers to irrigate their crops is at risk and domestic, commercial, municipal, and industrial uses and water quality are also affected. In response to the public's concern about the declining aquifer and associated economic and other effects, Congress has provided funding to Reclamation to investigate the problem. The State of Washington has agreed to partner with Reclamation, providing funding and collaborating on various technical studies.

February 2006 Public Meeting

Reclamation held its first public meeting for the Odessa Subarea Special Study in Moses Lake, Washington at the Big Bend Community College, Advanced Technical Education Center, on February 22, 2006. Approximately 100 people attended. Handouts distributed at the public meeting are posted on Reclamation's web site: www.usbr.gov/pn/programs/ucao_misc/ odessa/index.html. The meeting used an open house format, with seven stations staffed by Reclamation employees. Representatives from the U.S. Geological Survey and Washington Department of Ecology (Ecology) provided assistance at some stations.

Study Overview – Provided information about the study scope, requirements, steps, and time lines.

Columbia Basin Project – Provided information about Columbia Basin Project infrastructure and general operations.

Odessa Subarea Aquifer – Provided information about the Odessa Subarea aquifer and Reclamation's and Ecology's efforts to develop a groundwater model.

Environmental – Provided information about environmental regulatory requirements and procedures; requested input on environmental issues that Reclamation should address.

Economics – Provided information about the economic analyses Reclamation must conduct to determine the economic and financial feasibility of alternatives. *Engineering* – Provided an opportunity to discuss possible study alternatives with Reclamation's engineers.

Feedback - Requested input from meeting participants about the top three issues that Reclamation should address in the Odessa Subarea Special Study.

The open house format promoted opportunities for one-on-one discussion between meeting participants and Reclamation's study managers and technical experts. The feedback received at the meeting was organized into six categories: 1) Possible Alternatives, 2) Technical Guidance, 3) Water Rights and Supply, 4) Economics, 5) Environmental and Recreation, and 6) Study Process and Schedule. A summary of these comments is provided on page 4.

Reclamation will consider this feedback as it develops engineering alternatives. These comments will also help identify data collection needs and analytical studies to properly address the concerns and issues.

Project Alternative Solutions Study (PASS)

Reclamation is conducting a Project Alternative Solutions Study (PASS) to efficiently identify, develop, and evaluate alternatives for the Odessa Subarea Special Study. The PASS process is effective in helping to impartially identify alternatives that meet objectives and warrant further study. The PASS process involves two teams -- an Objectives Team and a Technical Team. The PASS Objectives Team is comprised of individuals representing stakeholder interests in the study area and has the role of developing criteria, objectives, and factors of acceptance for the alternatives that will be considered. The Technical Team, comprised of engineers and experts from other technical disciplines, will develop and evaluate numerous alternatives using the information provided by the Objectives Team.

Reclamation began the PASS process with an Objectives Team meeting on February 24, 2006, at Reclamation's Ephrata Field Office. The Objectives Team included representatives from municipalities and counties, Federal and state government agencies, Tribes, irrigation districts, groundwater users, as well as Reclamation staff. The Objectives Team developed a list of seven objectives that the PASS Technical Team will use to evaluate alternatives. Alternatives will be rated on how they differ in the ability to:

- 1. Replace all or a portion of current groundwater withdrawals within the Columbia Basin Project area of the Odessa Subarea aquifer with project water.
- 2. Maximize use of existing Columbia Basin Project infrastructure.
- 3. Retain the possibility of full Columbia Basin Project development in the future.
- 4. Address Endangered Species Act issues, including:
 - National Marine Fisheries Service's Columbia River seasonal flow objectives
 - Potential impact to shrub-steppe habitat
- 5. Provide environmental and recreational enhancements.
- 6. Minimize potential delay in the study schedule.
- Be developed in phases based on funding expectations, physical and operational constraints, and rate of groundwater decline.

Alternatives are currently being identified using the ideas provided by the public at the open house and from previous studies. This summer the PASS Technical Team will develop a decision matrix using these seven objectives to rank alternatives.

The Reclamation study team, with the assistance of Ecology, is currently compiling data and conducting analyses to develop the information that the PASS Technical Team will need to evaluate the alternatives. These efforts include preparing maps of shrubsteppe habitat, groundwater irrigated acreage, crop types, extent of groundwater decline, and soil types. Reclamation is also preparing various hydrologic and groundwater model analyses.

Reclamation will complete the PASS process and publish a report in September 2006. This report will identify the top ranked alternatives that Reclamation will use to focus its future study efforts. The PASS report will be available on Reclamation's website.

Future Activities

Reclamation will conduct an appraisal-level analysis of the top ranked alternatives identified from the PASS process. This analysis will require examining the selected alternatives, using readily available information, to determine if there are any fatal flaws or major constraints associated with the alternatives and identify those that merit continued study by Reclamation. The appraisal-level analysis is anticipated to take about six months, with completion expected in the spring of 2007. Reclamation will conduct a comprehensive feasibility-level analysis of those alternatives identified as most viable by the appraisallevel analysis. The feasibility-level study requires extensive data collection and analysis and development of detailed engineering drawings and cost estimates. Analyses to determine economic and financial feasibility of alternatives will occur. Reclamation will also compare the social and environmental effects of the alternatives. These analyses and the agency preferred alternative will be documented in a combined planning report and environmental impact statement. Reclamation anticipates completing the feasibility-level studies sometime during the summer of 2010.

For More Information

We will continue to provide you updates about study progress and the availability of reports and other study documents. If you have any comments or questions, please contact Ellen Berggren, Study Manager.

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Or visit our website at:

www.usbr.gov/pn/programs/ucao_misc/ odessa/index.html.

Summary of Feedback Received at February 22, 2006 Open House Meeting

Possible Alternatives

- Various options for using East Low Canal to get water to Odessa Subarea, i.e. increasing canal capacity, extending canal length, laterals from canal to Odessa Subarea lands.
- Investigate alternative means to supply feed water to Potholes Reservoir, resulting in additional capacity in the East Low Canal to service Odessa Subarea lands.
- Construct off-stream storage within the project to supply Odessa Subarea lands or to offset potential Columbia River flow effects to fish. Suggested locations include on-the-farm ponds, reregulating reservoirs adjacent to the East Low Canal, and small reservoirs in coulees and smaller drainages.
- Aquifer recharge and recovery.
- Utilize existing project infrastructure by modifying current Columbia Basin Project operations to obtain additional system capacity and operational flexibility to supply Odessa Subarea lands.
- Consider major offstream storage as a solution for the long-term.
- Supplement groundwater use with surface water instead of completely replacing groundwater irrigation.
- Consider full Columbia Basin Project development, i.e., construction of East High Canal.
- Identification of new infrastructure to convey water to Odessa Subarea, i.e., pipelines and pumping stations.

Technical Guidance

- Examine full Columbia Basin Project development, i.e., irrigating a full 1,029,000 acres.
- Specific areas identified for delivery of Columbia Basin Project water within the Odessa Subarea.
- Suggestions for on-farm delivery options, i.e., laterals, piping, etc.
- Develop alternatives with multiple purposes and benefits.
- Some people do not support providing project water to groundwater irrigators.
- Consider water conservation.
- Study scope should consider providing water to more than just groundwater irrigators.

Water Rights and Supply

- Determine how water rights will be affected.
- Consider municipal water supply needs as well as irrigation.
- Concerns about sufficiency of the water supply to provide groundwater irrigators with project water.
- Identify "new" water supplies.
- Replenish the Odessa Subarea aquifer.

Economics

- Consider the economic feasibility of pursuing alternatives.
- Preserve local communities, economies, and the agricultural economy.

Environmental and Recreation

- Take advantage of wildlife and recreation enhancement opportunities.
- Address impacts to wildlife and habitat for Federal endangered species and state sensitive species, with particular attention to impacts to shrub-steppe habitat.
- Consider air pollution, water quality impacts, and noxious weed concerns.

Study Process and Schedule

- Get it done as quickly as possible.
- Suggestions for working with stakeholders.
- Suggestions to implement a phased the study.