RECLAMATION
Managing Water in the West

New Surface Water Storage

U.S. Department of the Interior
Bureau of Reclamation
Reclamation Process

• Pre-appraisal Study (optional)
• Appraisal Study
• Authorization
• Feasibility Study/Environmental Compliance
• Contracts
• Construction
Appraisal Study

- Broad, high level analysis
- Recommends further study or not
- Addresses water need and availability
- Identifies potential non-structural alternatives
- Identifies potential “show stoppers”
- Only rough cost estimates are not made— not firm
Feasibility Study/Environmental Compliance

- Provides all information necessary for Congressional Authorization
- Complies with NEPA and ESA
- Provides detailed cost estimates and plans
- Principles and Guidelines (P&Gs) Includes:
  - National Economic Development (NED)
  - Environmental Quality (EQ)
  - Regional Economic Development (RED)
  - Other Social Effects (OSE)
## Time Frames

<table>
<thead>
<tr>
<th>Step</th>
<th>Time</th>
<th>Cumulative</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appraisal Study</td>
<td>12-24 Months</td>
<td>1-2 Years</td>
</tr>
<tr>
<td>Feasibility Authorization</td>
<td>12-36 Months?</td>
<td>2-5 Years</td>
</tr>
<tr>
<td>Feasibility Study</td>
<td>36 Months or more</td>
<td>5-8 Years?</td>
</tr>
<tr>
<td>Environmental/regulatory Compliance</td>
<td>Overlaps w/above</td>
<td></td>
</tr>
<tr>
<td>Construction Authorization</td>
<td>12-36 Months?</td>
<td>6-11 Years</td>
</tr>
<tr>
<td>Construction</td>
<td>5-8 Years?</td>
<td>11-19 Years??</td>
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</tbody>
</table>
## Funding

<table>
<thead>
<tr>
<th>Cost</th>
<th>Who Pays?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appraisal Study</td>
<td>Usually Reclamation</td>
</tr>
<tr>
<td>Feasibility Study</td>
<td>50-50</td>
</tr>
<tr>
<td>Construction</td>
<td>Per Allocation</td>
</tr>
</tbody>
</table>
Sites of Interest

• Boise/Payette
• Minidoka Raise
• Teton
Boise/Payette

- Appraisal Study Completed in July 2006
- Identified 8 “Areas of Opportunity”
- Additional storage ranged from 50,000 to 400,000 acre-feet
- Appraisal level cost estimates were developed but only used for site comparison purposes
- Status: Waiting for cost sharing and Feasibility Authorization, then funding
Minidoka Raise

- Considered about 3 years ago
- Cost sharing partners did not come forward
- Reclamation is proceeding with repairs (no raise)
- Potential added storage was 55,000 acre-feet for a 5 foot dam raise
- Potential increased cost for full raise was more than $100 Million (pre-appraisal grade estimate)
- Cost/acre-feet @ $100,000,000 = $1,800
- Best location on the River for new storage
Teton

- Total capacity = 288,000 acre-feet
- Total cost (indexed 1990 estimates):
  - Rockfill Embankment Dam $296 Million
  - Roller-Compacted Concrete $464 Million
- Cost/Acre-Foot of yield (indexed):
  - Embankment $3,950
  - Concrete $6,300
What’s going on next door?

- State of Washington has funded or is funding:
  - 50% of $17 million spent on Yakima Storage Feasibility Study
  - Nearly 100% of pre-appraisal and appraisal costs of Columbia River Off-Channel Storage Study (About $700,000)
  - About $1 million (nearly 100%) of Potholes Supplemental Feed Route Study costs
  - 50% ($4 million) of Odessa Sub-area Special Study
Spending by Category (OMB 2007)

1962:
- Discretionary: 68%
- Interest: 6%
- Mandatory: 26%

2006:
- Discretionary: 38%
- Interest: 9%
- Mandatory: 53%