

Wyoming Water Development Office

Hydrologic Data Needs

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WWDC Overview

- WWDC is a water infrastructure funding program
- Typical Project Funding
 - Studies – 100% WWDC
 - Design/Construction - grant/loan mix is 67%/33%
- WWDC does not deal with:
 - Water Quality regulation
 - Water Rights administration
- Project Progression
 - Level I – master planning/reconnaissance studies
 - Level II – feasibility studies
 - Level III – design and construction

WWDC Programs

- New Development
- Rehabilitation
- Dams & Reservoirs
- Water Planning
- Instream Flows
- Small Water Projects
- Groundwater Exploration
- Reservoir Management

New Development

- Level I Master Plans –
- Level II Feasibility Studies –
 - Groundwater depth & availability
 - Existing water rights (wells)
 - Groundwater quality
 - Surface water availability (direct flow)
 - Stream gages
 - Existing water rights
- Level III Design and Construction –

Rehabilitation

- Level I Master Plans –
- Level II Feasibility Studies –
 - Surface water availability (direct flow)
 - Stream gages
 - Existing water rights
 - Surface water availability (storage)
- Level III Design and Construction –

Dams and Reservoirs

- Level I Reconnaissance Studies –
 - Surface water availability (direct flow)
 - Stream gages
 - Existing water rights
- Level II Feasibility Studies –
 - Surface water availability (direct flow)
 - Stream gages for multiple alternatives
 - Existing water rights for multiple alternatives
 - Hydrological modeling
- Level III Design and Construction –

Water Planning

- River Basin Studies
 - Surface water availability (direct flow)
 - Stream gages
 - Existing water demands
 - Hydrological modeling
 - Groundwater availability
 - Aquifer characterization
 - Existing water rights (wells)
 - Groundwater quality

Water Planning

- Watershed Plans
 - Surface water availability (direct flow)
 - Stream gages on small streams
 - Existing water demands (irrigation)
 - Small basin hydrological modeling
 - Riparian health assessments
 - Surface water impairments
 - Erosion concerns
 - Impaired streams (303d) designations

Instream Flows

- Water Availability Study
 - Stream gages
 - Small basin hydrological models
 - Existing water rights

Small Water Projects

- Projects generally include:
 - Stock dams
 - Stock wells
 - Stock pipelines
- Hydrological data needs are negligible

Groundwater Exploration Program

- Hydrological data needs
 - Groundwater depth & availability
 - Existing water rights (wells)
 - Groundwater modeling
 - Groundwater quality

Reservoir Management

- Federal Reservoir Contracts –
- State Owned Reservoirs
 - High Savery Reservoir
 - Snotel sites to determine SWE
 - Runoff modeling



Questions ??????