

## Glossary and Acronyms

- 1945 Judgment the Consent Judgment [*in Kittitas Reclamation District v. Sunnyside Valley Irrigation District* (Civil 21, E. Dist. Wash., 1945)]
- *Acquavella* case a Yakima River basin water adjudication court case in Yakima County Superior Court
- active capacity the reservoir capacity or quantity of water which lies above the inactive reservoir capacity and is normally usable for storage and regulation of reservoir inflow to meet established reservoir operating requirements
- antecedent flood a flood or series of floods assumed to occur prior to the occurrence of an inflow flood used to design a specific dam
- anticline a geologic fold that is convex upward
- alternate damsite upstream alignment explored by Reclamation
- appraisal-level design designs based on limited analyses, available design data, and professional assumptions but of sufficient detail to provide satisfactory quantities and preliminary field cost estimates
- Assessment the gathering and appraisal-level assessment of the data and information contained in this Summary Report
- average water supply year a water supply in the Yakima River basin between 2,250,000 and 3,250,000 acre-feet
- Benton Board Board of Benton County Commissioners
- Black Rock outlet facility a potential facility to divert water at the downstream end of an outflow conveyance system into potential or existing Roza and Sunnyside Divisions' delivery system facilities; this facility would include a bifurcation works and a Black Rock powerplant
- Black Rock powerplant a potential powerplant near Roza Canal MP 22.6 at the potential Black Rock outlet facility
- BPA Bonneville Power Administration
- CBP Columbia Basin Project
- cfs flow rate in cubic feet per second

## GLOSSARY AND ACRONYMS

• delivery systems	the potential canal, pipeline, or tunnel systems that would deliver water from the potential Black Rock outlet facility to the existing or modified Roza and Sunnyside Divisions' canal systems for delivery to Yakima Project lands
• dry year	a water supply in the Yakima River basin less than 2,250,000 acre-feet
• Ecology	Washington Department of Ecology
• ESA	Endangered Species Act
• ethnographic	relating to the branch of anthropology that deals historically with the origin and filiation of races and cultures
• FCRPS	Federal Columbia River Power System
• flow targets	instream flow targets as established in the December 2000 FCRPS Biological Opinion [4] and retained in the 2004 FCRPS Biological Opinion [5], and flow objectives for nonlisted salmon downstream from Priest Rapids Dam at Vernita Bar
• freed-up Yakima River water	the Yakima River water currently used by potential exchange participants that would not be diverted by those participants, but would instead be used for instream flow, dry-year proratable irrigation water rights, and future municipal supply needs
• fry	the life stage of fish between the egg and fingerling stages
• Grant PUD	Grant County Public Utility District
• Hanford Reach	the Columbia River reach extending from 15 miles upstream from the mouth of the Yakima River to Priest Rapids Dam
• heavy load hours	periods of highest electricity use, from 6 a.m. to 10 p.m., Monday through Saturday
• hydraulic grade line	the surface or profile of water flowing out of hydraulic gradient; the slope of the hydraulic grade line is under pressure; the hydraulic grade line is the actual level to which water would rise in a small vertical tube connected to the pipe
• hydraulic gradient	the slope of the surface of open or underground water

• Hyd-Sim	the BPA computer model used as the hydrologic basis for the 2000 Biological Opinion [4]; it includes the significant United States Federal and non-Federal dams and the major Canadian projects on the main stem Columbia River and its major tributaries
• inactive capacity	the reservoir capacity or quantity of water which lies beneath the active reservoir capacity and is normally unavailable for withdrawal because of operating agreements or physical constraints
• inflow conveyance	the system and facilities that would transport water from the potential Columbia River intake to a Black Rock reservoir
• in-lieu exchange	a potential Columbia River diversion used by lower Yakima Valley irrigation entities in lieu of existing Yakima River diversion
• kWh	kilowatt-hour
• light load hours	periods of low electricity use, from 10 p.m. to 6 a.m., Monday through Saturday and all day Sunday
• liquefaction	a loss of material strength during earthquake shaking that can result in large areas of slope failure or settlement of the ground surface
• Ma	million annum; million years
• maximum section	maximum cross-sectional area of a dam embankment
• MP	mile post – refers to locations on the Roza Canal with MP 0.0 being at Roza Diversion Dam
• MW	megawatt
• natural flow	river flow that originates from a source other than reservoir storage
• NOAA Fisheries	the National Oceanic and Atmospheric Administration, National Marine Fisheries Service
• nonprorated water rights	pre-Yakima Project senior water rights related to natural flows that are served first and cannot be reduced until all the proratable rights are regulated to zero
• original damsite	farthest downstream alignment explored by Washington Infrastructure Services, Inc.
• outflow conveyance	the potential system and facilities that would release water stored in a Black Rock reservoir and convey it to a downstream Black Rock outlet facility

## GLOSSARY AND ACRONYMS

• overburden	a thick deposit of sediments overlying bedrock
• PHA	Peak Horizontal Acceleration; a measure of very high frequency earthquake ground motions
• plinth	a concrete pedestal or footing located beneath the base of a dam's concrete face
• Priest Rapids intake	a potential intake facility on the right bank of Priest Rapids Lake about 3,600 feet upstream from Priest Rapids Dam that would pump Columbia River water to a potential Black Rock reservoir; one of the three intake options includes a Priest Rapids pump/generation plant
• Priest Rapids pump/generation plant	a potential combined pump/generation plant incorporated in the potential Priest Rapids intake facility that would permit Columbia River water stored in a Black Rock reservoir to return to the Columbia River to generate power
• prorated water rights	newer junior water rights related to storage water that, in water short years, receive less than their full right on a prorated basis
• PSHA	Probabilistic Seismic Hazard Assessment; a technique that provides an assessment of the annual levels of earthquake ground motions that the site might experience based on the rates of seismic activity and fault movements in the region surrounding the site
• RCC	roller compacted concrete – no-slump concrete placed by earth-moving equipment and compacted by vibrating rollers in horizontal lifts up to 12 inches thick
• RCW	Revised Codes of Washington; State laws
• Reclamation	U.S. Department of the Interior, Bureau of Reclamation
• redd	the nest that a spawning female salmon digs in gravel to deposit her eggs
• Reserved works	facilities operated and maintained by Reclamation
• RM	river mile – refers to locations on either the Yakima River or the Columbia River
• Roza Division	a division of Yakima Project comprised of Roza Irrigation District
• Roza Powerplant	the existing powerplant located at Roza Canal MP 11
• Roza-Selah lands	those irrigated lands upstream from the inlet of Roza Canal tunnel No. 3

• SH	State Highway
• storage facilities	a potential Black Rock dam and related facilities that would impound in a Black Rock reservoir the Columbia River water received via an inflow conveyance system
• Storage Study	Yakima River Basin Water Storage Feasibility Study; a multi-year evaluation of the viability and acceptability of several storage augmentation alternatives, including a potential water exchange, for the benefit of fish, irrigation, and municipal water supply within the Yakima River basin
• storage water	water that has been stored and purposefully released
• Summary Report	<i>Summary Report - Appraisal Assessment of the Black Rock Alternative - A component of Yakima River Basin Water Storage Feasibility Study, Washington</i>
• Sunnyside Division	a division of Yakima Project comprised of Sunnyside Valley Irrigation District and eight other irrigation districts, companies, and cities
• Sunnyside powerplant	a potential new powerplant at Sunnyside Canal MP 3.83
• tailrace	the body of water immediately downstream from a powerplant or pumping plant that regulates fluctuating discharges from the plant
• total capacity	the total reservoir capacity or quantity of water which can be impounded in the reservoir below the maximum water surface elevation
• transferred works	facilities owned by Reclamation, but operated and maintained by an irrigation district or other entity
• Treaty	Columbia River Treaty
• UCAO	Reclamation's Upper Columbia Area Office
• USGS	U.S. Department of the Interior, Geological Survey
• value engineering	an organized team effort directed at analyzing the functions of processes, systems, equipment, facilities, services, and supplies for the purpose of achieving the essential functions at the lowest life-cycle cost consistent with required performance, reliability, quality, and safety
• WAC	Washington Administrative Code; State rules and regulations
• WDFW	Washington Department of Fish and Wildlife

## GLOSSARY AND ACRONYMS

- wet year a water supply in the Yakima River basin greater than 3,250,000 acre-feet
- WIS Washington Infrastructure Services, Inc. – the contractor Benton County, Washington, commissioned to study the technical feasibility and approximate cost of a Black Rock alternative
- Work Group Biology Technical Work Group; consists of technical representatives from NOAA Fisheries, U.S. Fish and Wildlife Service, Washington Department of Fish and Wildlife, Washington Department of Ecology, the Yakama Nation, Yakima Basin Joint Board, Yakima Sub-Basin Fish and Wildlife Planning, and Reclamation’s Upper Columbia Area Office and Technical Service Center
- Yak-RW Yakima Project RiverWare model; is a daily time step reservoir and river operation computer model of the Yakima Project created with the RiverWare software