



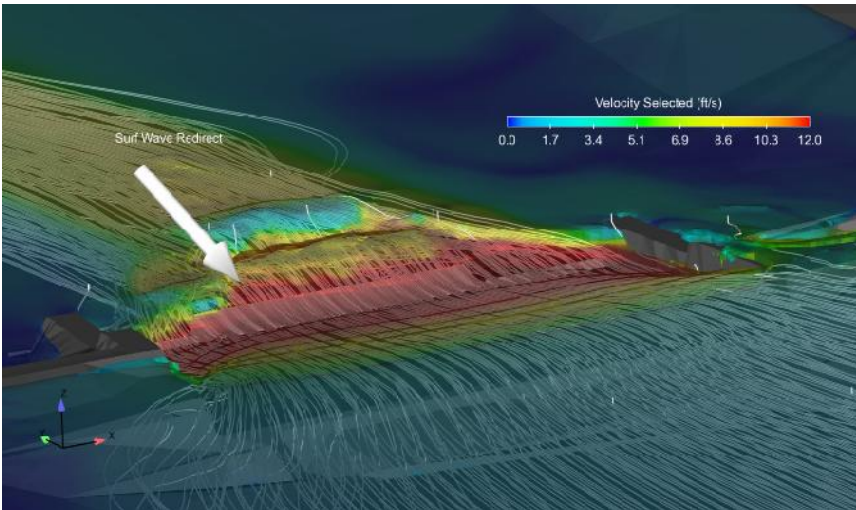
COLORADO DAM PADDLE TRAIL IMPROVEMENTS



The Bend Parks and Recreation District pursued a whitewater park to replace the hazardous 9-ft Colorado Dam on the Deschutes River. Following initial feasibility analysis, BPRD soon recognized that the project was not only a whitewater park, but a river project with sensitive aquatic species, dam stabilization issues and fish and boat passage concerns. RiverRestoration was retained in 2010 to develop realistic and practical solutions to these issues. Our philosophy of looking at river system function, combined with our rigorous and analytical design of whitewater features was the recipe for success on the Deschutes River. RiverRestoration quickly identified improvements to the concept for benefits to whitewater, passage and habitat. RiverRestoration provided the river engineering required for the success of the Colorado Dam Paddle Trails Improvements including 3D CFD design of unique features for river surfing and kayaking. The instream features incorporated Obermeyer Hydro, Inc. dynamic gates for a tailored recreational experience for all flow rates and user abilities. Project direction and goals were guided through communication and collaboration with stakeholders throughout the design process. The project construction was completed in February 2016 and has become a key recreational asset for the community for all types of river users.



Deschutes River after construction



3D hydraulic modeling output of Drop 3 design



River surfing Drop 3 final product

PASSAGE CHANNEL: Accommodations for river users and fish to navigate the Deschutes River through Bend, Oregon.

WHITEWATER CHANNEL: A series of pneumatically adjustable whitewater features for kayakers and surfers to hone their skills.

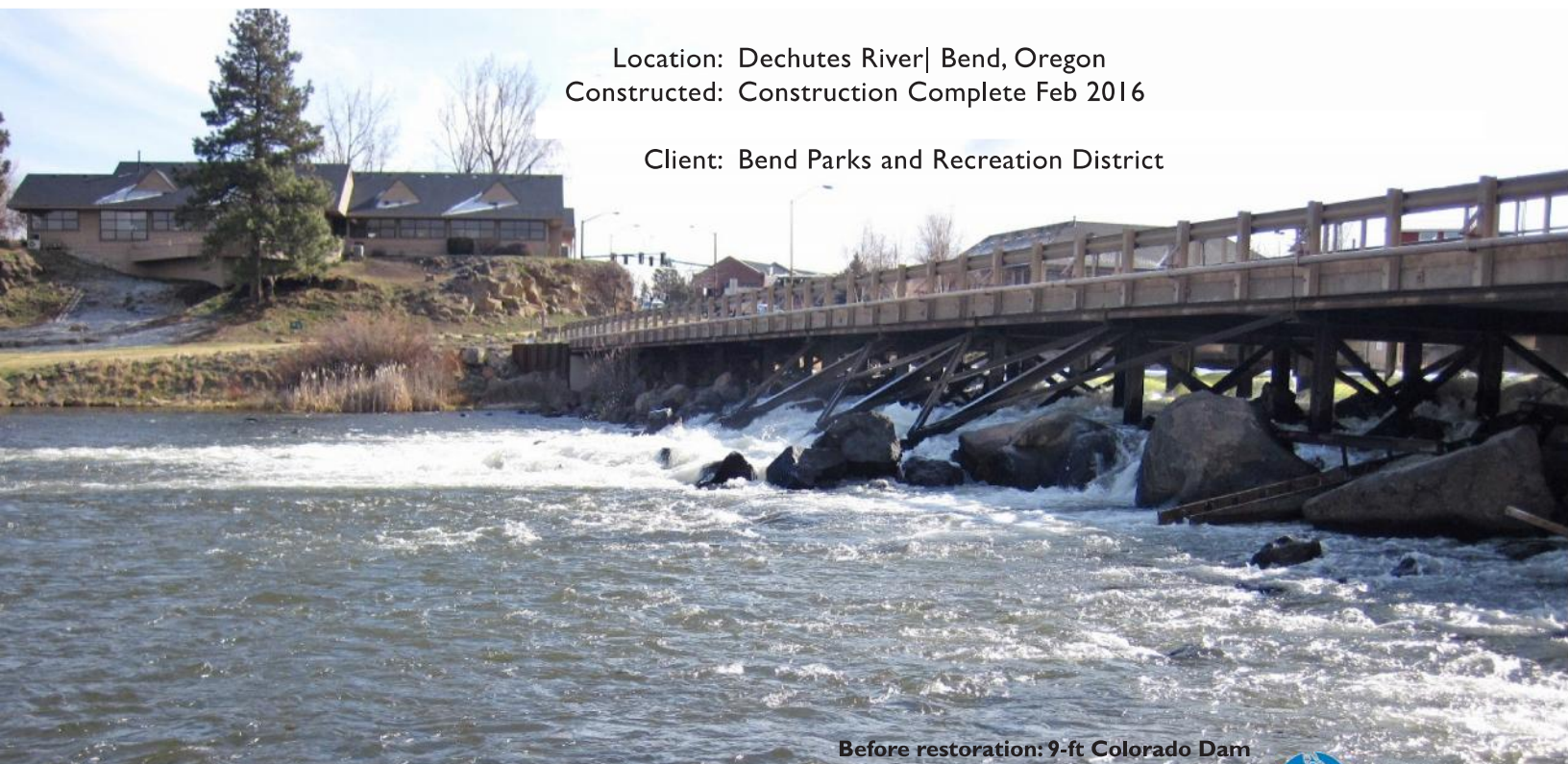
HABITAT CHANNEL: Enhancement of riverine habitat especially for the threatened Oregon Spotted frog.

AWARDS:

- Award of Merit for Best Water/ Environment Project from the Engineering News-Record 2016 Best Projects
- National "Facility or Park Design Award" by the National Recreation and Park Association

Location: Dechutes River| Bend, Oregon
 Constructed: Construction Complete Feb 2016

Client: Bend Parks and Recreation District



Before restoration: 9-ft Colorado Dam