

Early concerns regarding salmon and steelhead survival in the lower Yakima River

- What factors are limiting juvenile and adult passage and survival in the lower Yakima River?
- Are high water temperatures in the backwater of Bateman Island causeway affecting juvenile and adult fish passage and survival?
- Are high concentrations of warm water fish species causing predation near Bateman Island?
- Can flow patterns and water quality at the mouth of the Yakima River be modified to improve fish passage and reduce mortality?

Previous Studies

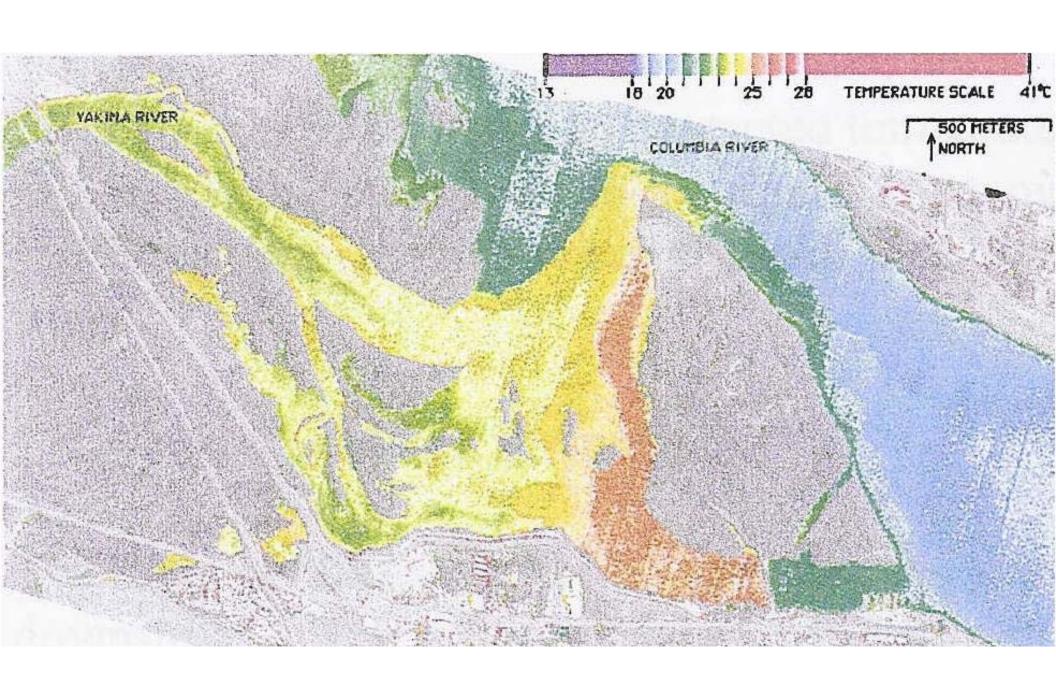
1998, 2004, 2011, 2014

Bureau of Reclamation, U.S. Army Corps of Engineers, Benton Conservation District, Mid-Columbia Fisheries Enhancement Group

- High temperatures
- Open causeway
- Temps reduced with flow on south side of Bateman Island







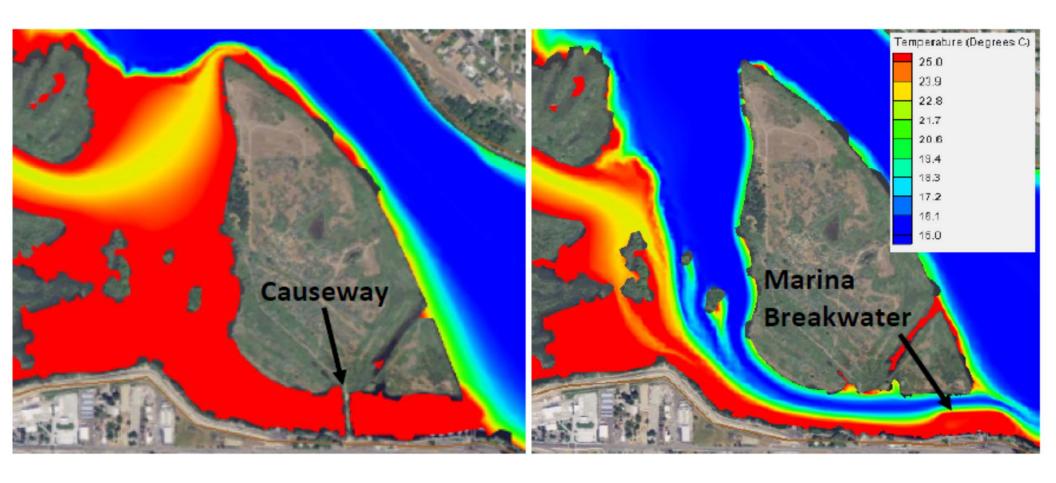
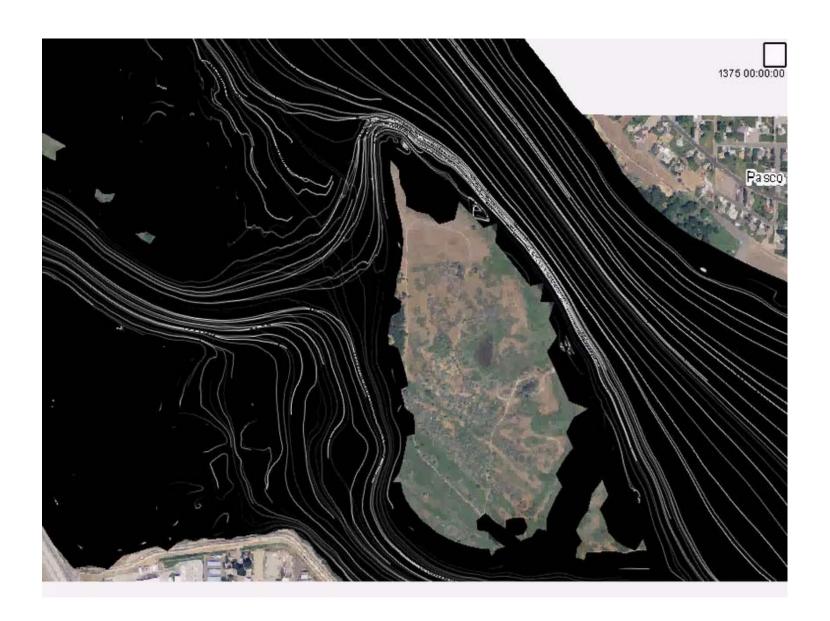
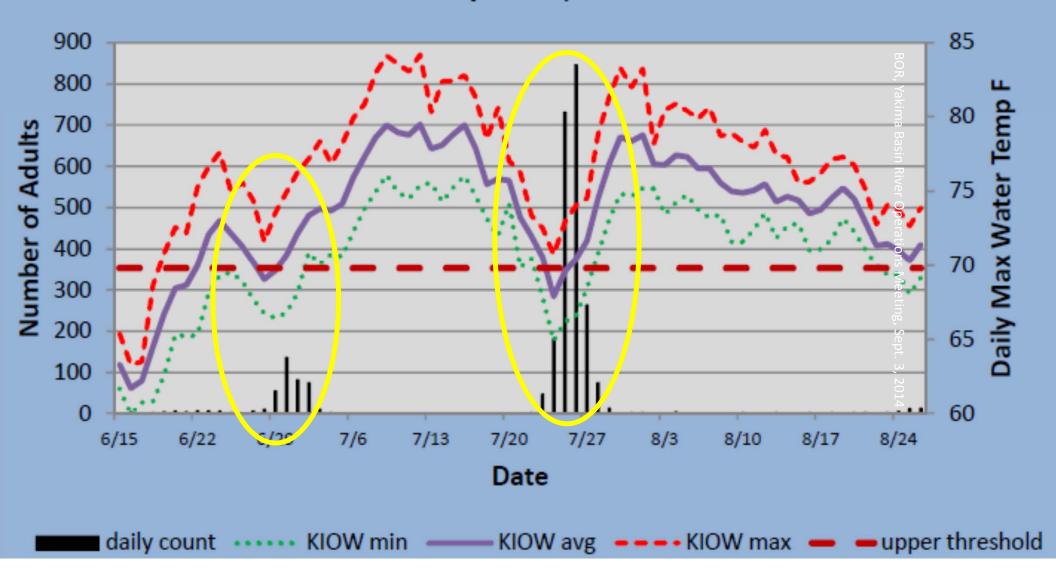


Figure EX1: Simulated Temperatures for a Moderately High Columbia River Discharge on July 8, 2012, (Left) Existing Conditions, (Right) Alternative 8, Full Causeway Removal with a Breakwater around Marina



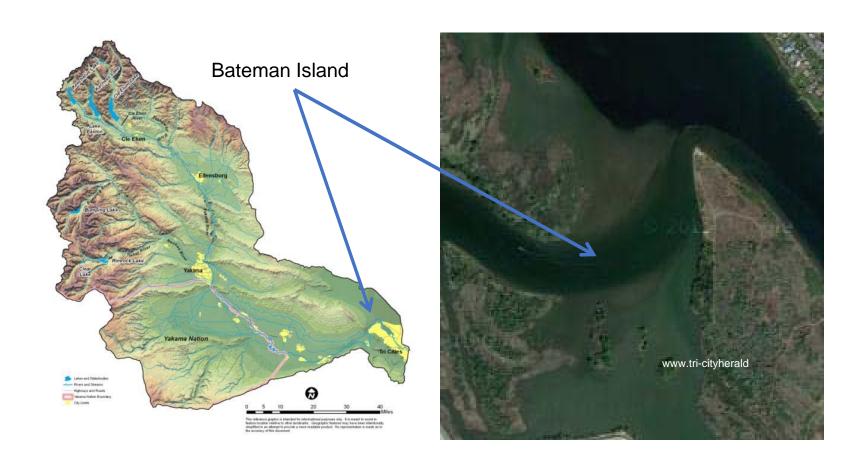


2014 Sockeye Run, Prosser Dam





Gateway and Cornerstone to Millions of Upstream Investment Dollars



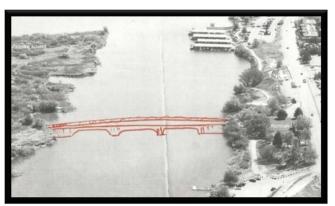


Community Input

April 2014

- Focus = fisheries
- Hand drawn by public

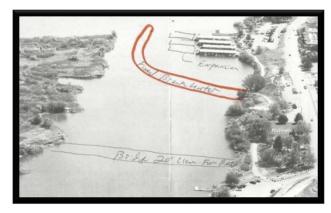
Partial breach



Full breach



Full breach & breakwater





LOCAL

JUNE 25, 2016 6:31 PM

Bateman Island causeway eyed for breaching to save salmon, steelhead

HIGHLIGHTS

Land bridge hurts salmon, steelhead

Richland wants to protect public access, private marina

LOCAL

JULY 6, 2016 4:30 PM

Momentum builds for Bateman Island access, marina

Port of Kennewick to lend support to island

State contemplates helping fish by breaching

LETTERS TO THE EDITOR JULY 10, 2016 2:18 AM

Letter: Breaching Bateman Island causeway would create unmanageable current for boaters

LETTERS TO THE EDITOR AUGUST 2, 2016 3:55 AM

Letter: Inconvenience to boat owners shouldn't stop breach of Bateman Island causeway

EDITORIALS JULY 6, 2016 5:03 AM

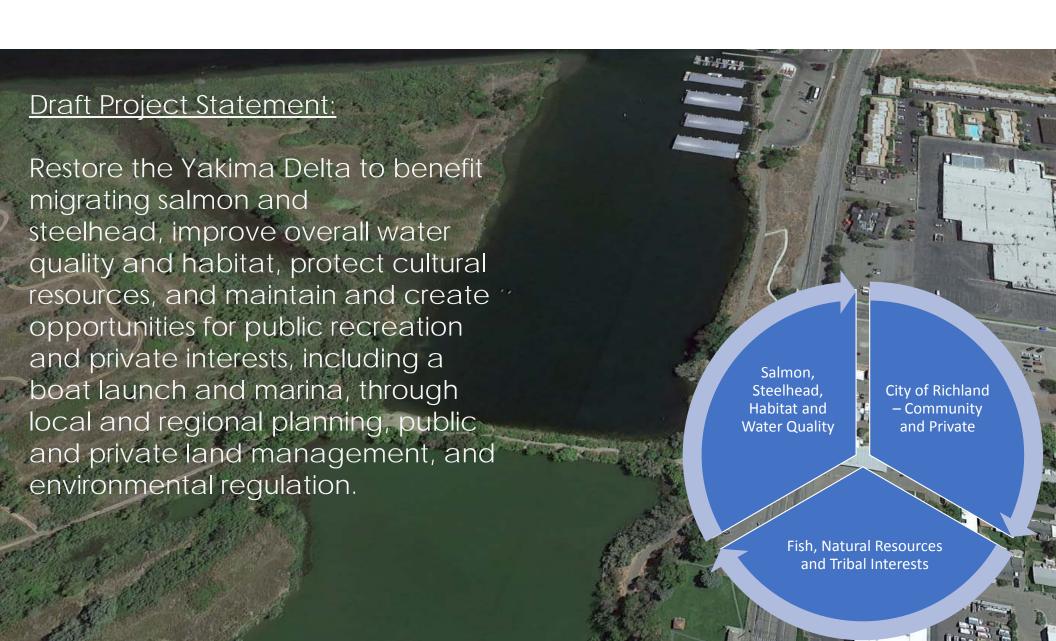
Our Voice: State responsible for mitigation if Bateman causeway breached

Expanding Outreach and Partnerships

September-December 2016: 13 WDFW/Kennewick Irrigation District Presentations

Key Audiences: Cities, Ports, Visit TRI-CITIES, Mosquito Control, Lower Columbia Audubon, Richland Rod and Gun, Coastal Conservation Association







2018 Project Update

- In 2016, December Stakeholder meeting included US Army Corps of Engineers (USACE) who suggested Section 1135 funding was a possibility.
- Stakeholders include: State and Federal Natural resource agencies, Tribal interests, City of Richland, Mid-Columbia Fisheries, and Columbia Park Marina.
- City of Richland now actively engaged in the process.
- Letter of Intent drafted and delivered to USACE March 8, 2017.
- Awaiting USACE decision.





The Continuing Vision

Remove a significant fish passage barrier

- Improve river conditions for migratory salmon and Steelhead
- Improve overall environmental and recreational conditions.

Access

- Address public access
- New recreational opportunities

Marina

- Relocation or Design Modification
- Improvements to the Yakima Delta will have long-term positive impacts



Bateman After 2017 Fire - Courtesy of News Talk 870

