Reducing Toxics in the Columbia River Basin

Reconvening the Columbia River Toxics Reduction Working Group and Implementing the Columbia River Basin Restoration Act

Oct 30, 2018

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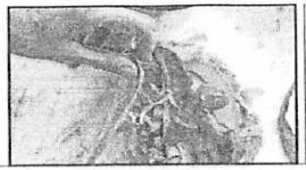
Today's Conversation

- Brief History of Columbia River Toxics Reduction
- Columbia River Basin Restoration Act
- Moving Forward with a Plan: Forming Workgroups

News Flash! September 24, 2013

KIDS' LUNCHES MADE SMARTER

New cookbooks offer healthier options • FOODDAY



Apple excites Oregon data industry BUSINESS, C1

Ducks' secondary faces first real test SPORTS, D1

The Oregonian

$1.00 POWERING OregonLive.com TUESDAY, SEPTEMBER 24, 2013

Fish living near Bonneville Dam toxic

Resident fish are contaminated with PCBs and mercury, but migratory fish are OK

By LYNNE TERRY
THE OREGONIAN

Fish that live year-round just above Bonneville Dam are so chock-full of contaminants that health authorities on Monday advised the public not to eat them at all.

They also urged the public to limit the consumption of so-called resident fish in a 150-mile stretch upstream from Bonneville Dam.

The advisory does not affect migratory fish, such as salmon, steelhead, American shad and lamprey. But it does include sturgeon and walleye, two species popular with tribes.

Tests were done on Columbia River fish collected in August 2011, under the auspices of the U.S. Army Corps of Engineers. The Oregon Health Authority got the results this past May and then performed extensive analysis.

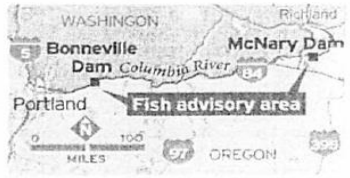
The results were surprising. The threshold for a health advisory for polychlorinated biphenyls, or PCBs, is 0.047 parts per million. The tests turned up 183 parts per million.

"That's higher than I've ever seen," said David Farrer, Oregon's public health toxicologist.

By comparison, tests on carp in the Willamette River around Portland harbor, another contaminated site, turned up 5 parts per million of PCBs.

In the Columbia River, smallmouth bass were tested near the Bonneville Dam. They were collected between the dam and Ruckle Creek, a one-mile stretch.

Please see **FISH**, Page A3



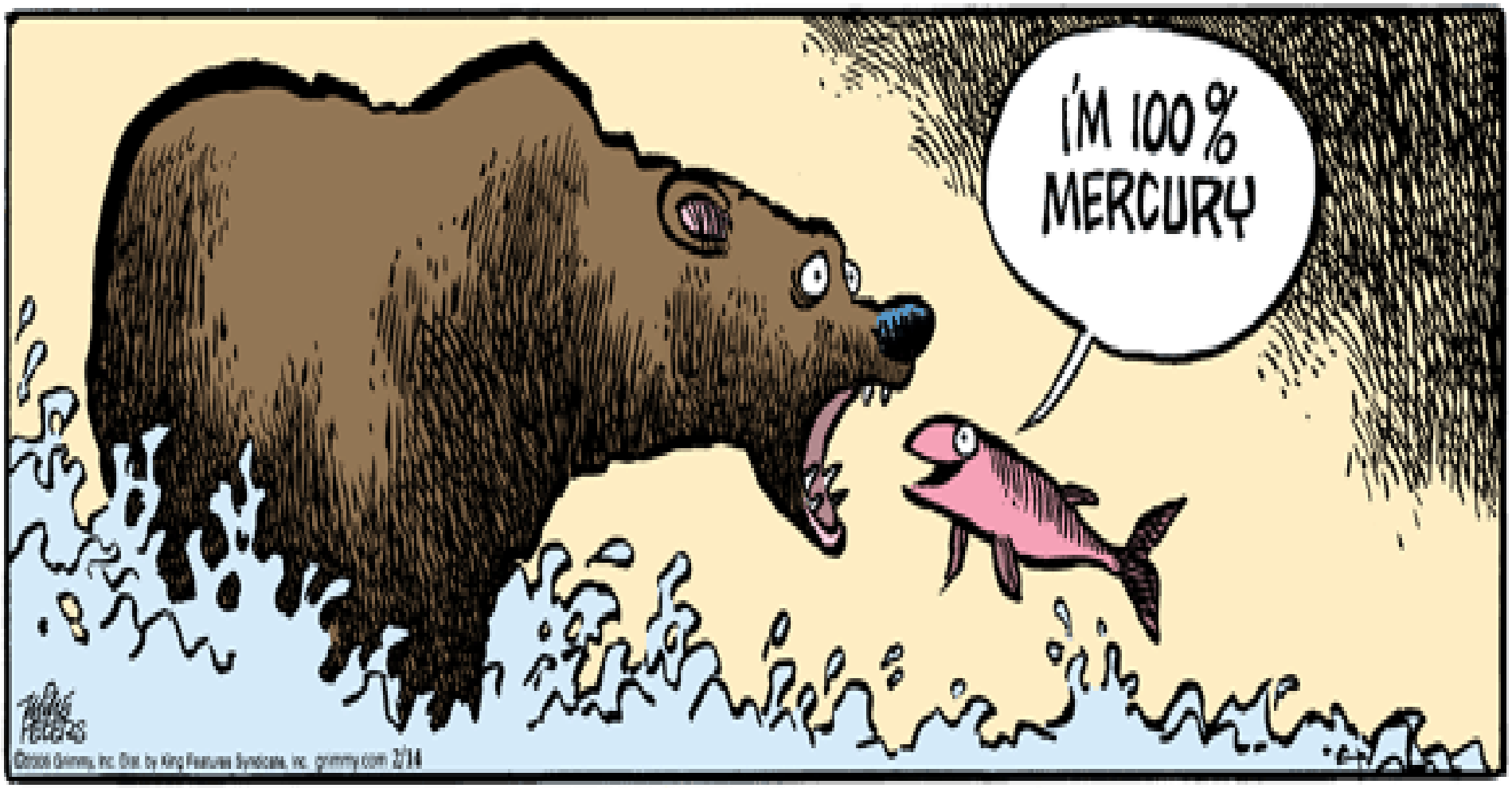
DAN AGUAYO/THE OREGONIAN

RESIDENT FISH under advisory include: bass, bluegill, yellow perch, crappie, walleye, carp, catfish, suckers and sturgeon.

An Additional Challenge for Watershed Restoration

- **Successful watershed restoration depends on reducing toxics**
- **We need more toxics reduction and assessment**

Toxics are a Contemporary Issue



Mother Goose and Grimm – Feb. 14, 2006

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Toxics are a Legacy Issue

Women's Day

June 1, 1947

Pacific Northwest History
Celilo Falls

Tribal Culture based on Fish

2002 EPA and CRITFC Fish Contaminant Study

- 92 pollutants detected in fish
- Fish taken from 24 Tribal fishing sites in Columbia River Basin from 1996 to 1997
  - Anadromous: fall/spring chinook, steelhead trout, smelt and pacific lamprey
  - Resident: rainbow trout, mountain whitefish, white sturgeon, walleye, large scale sucker, bridgelip sucker
- PCBs, dioxins, furans, arsenic, mercury, and DDE, a breakdown product of DDT

Columbia River Toxics Reduction Strategy

- Collaborative watershed effort to reduce toxics
- Columbia River Toxics Reduction Working Group
- State of River Report - “tell toxics story”
- Columbia River Basin Action Plan - 61 actions
- Columbia River Basin legislation introduced in Congress in 2010 and 2014 with toxics focus

Key Partners

- ✓ Federal, State and Local Governments
- ✓ Columbia River Tribal Governments
- ✓ Lower Columbia River Estuary Partnership
- ✓ Northwest Power and Conservation Council
- ✓ Columbia River Inter-Tribal Fish Commission
- ✓ Upper Columbia River United Tribes
- ✓ Upper Snake River Foundation
- ✓ Agriculture – farmers, Stormwater Conservation Districts, NRCS
- ✓ Industry - Pulp and Paper (NWPPA), Nike, Toyota, Longview Fiber
- ✓ Municipal Dischargers (ACWA)
- ✓ NGOs - Salmon Safe, Columbia Riverkeeper, Oregon Environmental Council
- ✓ Local Watershed Councils

EPA
United States
Environmental Protection
Agency
Region 10

EPA 910-R-08-004 | January 2009

Columbia River Basin:
State of the River Report for Toxics
January 2009

www.epa.gov/region10/columbia

2009 Columbia River Basin State of the River Report for Toxics

Contaminants of Concern

- Toxics are widely distributed and at levels of concern throughout Basin
- Reduction efforts have been successful
- Gaps in sources, effects and levels

Mercury – major source is air deposition, some regional sources

DDT – banned in 1972, still persists

PCBs – manufacturing banned in 1979, still widespread, learning about new sources

PBDEs – flame retardants are a growing concern

2010 Framework: Columbia River Basin Toxics Reduction Action Plan

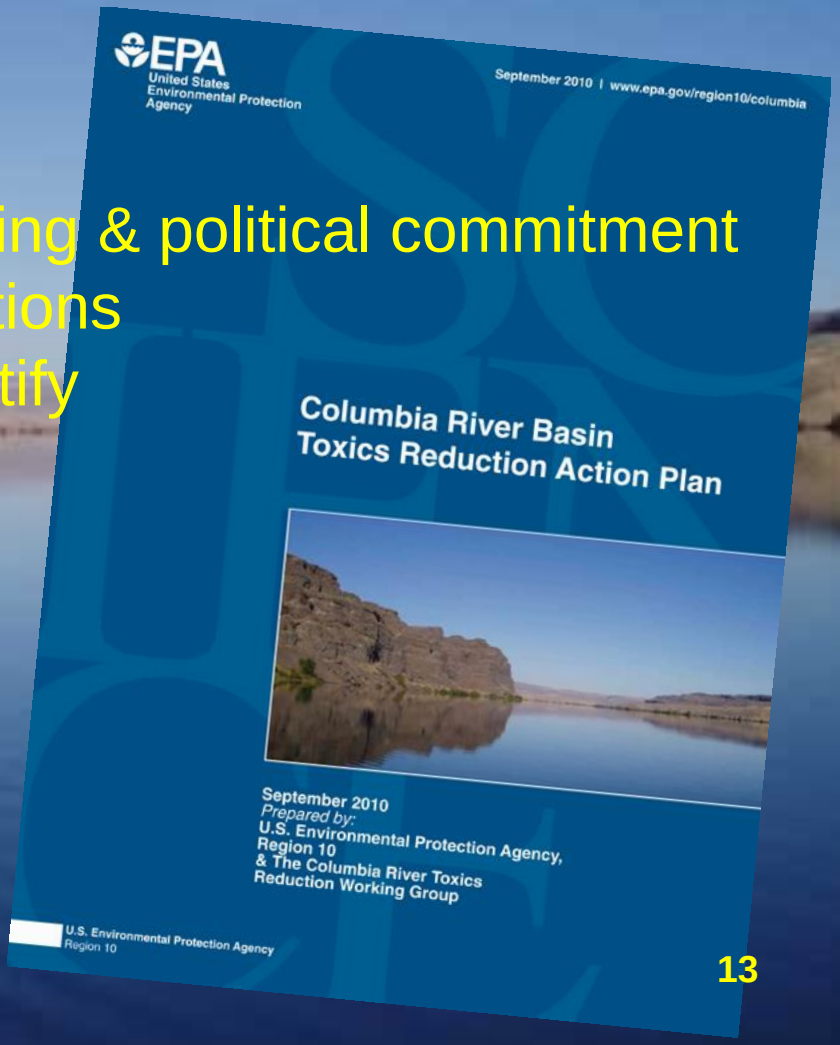
61 Actions

5 Initiatives

- Increase public understanding & political commitment
- Increase toxic reduction actions
- Increase monitoring to identify sources
- Develop research program
- Develop data management system

2 Tiers

- Existing re$ource$
- New re$ource$



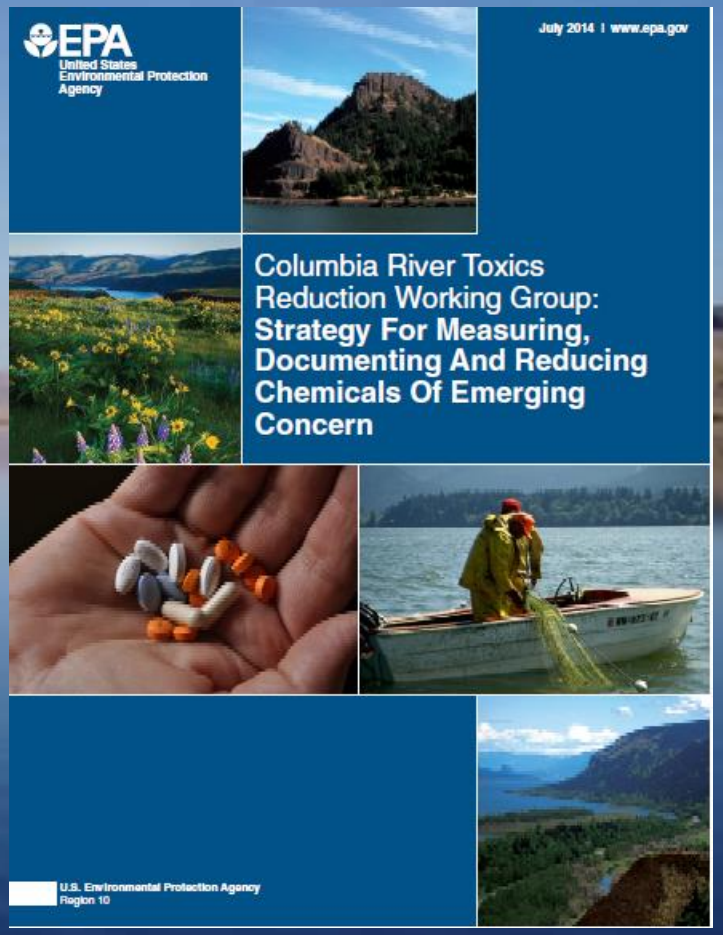
Positive Action to Reduce Toxics

- Columbia River Toxics Reduction Strategy
- Yakima River DDT Reductions
- Salmon Safe
- Green Chemistry/EPA Safer Choice
- Agricultural Leaders and Heroes
- Pesticide Stewardship Partnerships
- Stormwater/Green Infrastructure

- Implementation of Columbia River Basin Restoration Act

2014 Chemicals of Emerging Concern Strategy

- Nanoparticles
- Pharmaceuticals
- Personal care products
- Estrogen-like compounds
- Flame retardants
- Detergents
- Some industrial chemicals with potential significant impact on human health and aquatic life



Columbia River Basin Restoration Act

- 2007, 2008, 2009 Estuary Partnership requests appropriation for Toxics reduction
- Senator Merkley staff worked with Estuary Partnership on bill concept
- Basin wide regional group convenes to provide input into legislation
- Introduced in 2010, Hearings held in Senate & House
- Reintroduced in 2014, no Hearings
- Passed in Dec 2016 in WRDA and signed into Law

What Section 123 Does

- Amends the Clean Water Act, Section 123
- Directs EPA to develop a Columbia River Basin restoration program (voluntary/non-regulatory)
  - Sec 123(b)
  - Create a stakeholder working group - Sec 123(b)(3)(c)
  - Create a grant program - Sec 123(d)
    - Cost share, geographic allocations, reporting requirement
- Annual budget plan is required
- No appropriations yet

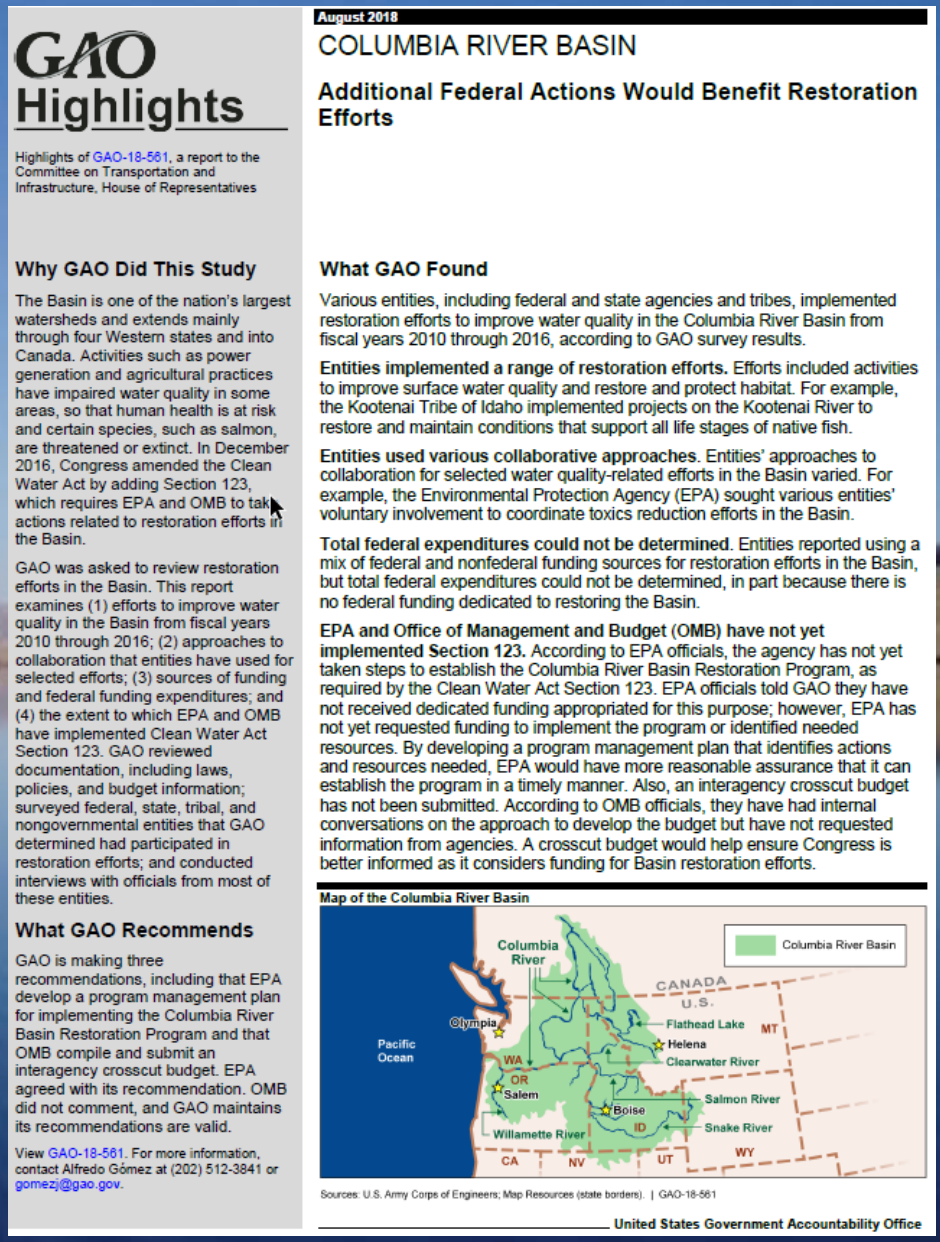
How Section 123 Funds Can be Used

- (3) DUTIES The Administrator shall -
- (A) assess trends in water quality, including trends that affect uses of the water of the Columbia River Basin;
- (B) collect, characterize, and assess data on water quality to identify possible causes of environmental problems; and
- (C) provide grants in accordance with subsection (d) for projects that assist in:
  - (i) eliminating or reducing pollution;
  - (ii) cleaning up contaminated sites;
  - (iii) improving water quality;
  - (iv) monitoring to evaluate trends;
  - (v) reducing runoff;
  - (vi) protecting habitat; or
  - (vii) promoting citizen engagement or knowledge.

August 2018 Columbia River GAO Report

3 Recommendations:

- **EPA develop program management plan for implementing Columbia River Basin Restoration Plan – submit to Congress**
- **OMB develop and provide guidance on types of projects activities that should be included in agency reports**
- **OMB directs federal agencies to submit an interagency cross cut budget to OMB as part of President's 2020 budget request**



GAO Highlights

Highlights of GAO-18-561, a report to the Committee on Transportation and Infrastructure, House of Representatives

Why GAO Did This Study

The Basin is one of the nation's largest watersheds and extends mainly through four Western states and into Canada. Activities such as power generation and agricultural practices have impaired water quality in some areas, so that human health is at risk and certain species, such as salmon, are threatened or extinct. In December 2016, Congress amended the Clean Water Act by adding Section 123, which requires EPA and OMB to take actions related to restoration efforts in the Basin.

GAO was asked to review restoration efforts in the Basin. This report examines (1) efforts to improve water quality in the Basin from fiscal years 2010 through 2016; (2) approaches to collaboration that entities have used for selected efforts; (3) sources of funding and federal funding expenditures; and (4) the extent to which EPA and OMB have implemented Clean Water Act Section 123. GAO reviewed documentation, including laws, policies, and budget information; surveyed federal, state, tribal, and nongovernmental entities that GAO determined had participated in restoration efforts; and conducted interviews with officials from most of these entities.

What GAO Recommends

GAO is making three recommendations, including that EPA develop a program management plan for implementing the Columbia River Basin Restoration Program and that OMB compile and submit an interagency crosscut budget. EPA agreed with its recommendation. OMB did not comment, and GAO maintains its recommendations are valid.

View GAO-18-561. For more information, contact Alfredo Gómez at (202) 512-3841 or gomezj@gao.gov.

August 2018

COLUMBIA RIVER BASIN

Additional Federal Actions Would Benefit Restoration Efforts

What GAO Found

Various entities, including federal and state agencies and tribes, implemented restoration efforts to improve water quality in the Columbia River Basin from fiscal years 2010 through 2016, according to GAO survey results.

Entities implemented a range of restoration efforts. Efforts included activities to improve surface water quality and restore and protect habitat. For example, the Kootenai Tribe of Idaho implemented projects on the Kootenai River to restore and maintain conditions that support all life stages of native fish.

Entities used various collaborative approaches. Entities' approaches to collaboration for selected water quality-related efforts in the Basin varied. For example, the Environmental Protection Agency (EPA) sought various entities' voluntary involvement to coordinate toxics reduction efforts in the Basin.

Total federal expenditures could not be determined. Entities reported using a mix of federal and nonfederal funding sources for restoration efforts in the Basin, but total federal expenditures could not be determined, in part because there is no federal funding dedicated to restoring the Basin.

EPA and Office of Management and Budget (OMB) have not yet implemented Section 123. According to EPA officials, the agency has not yet taken steps to establish the Columbia River Basin Restoration Program, as required by the Clean Water Act Section 123. EPA officials told GAO they have not received dedicated funding appropriated for this purpose; however, EPA has not yet requested funding to implement the program or identified needed resources. By developing a program management plan that identifies actions and resources needed, EPA would have more reasonable assurance that it can establish the program in a timely manner. Also, an interagency crosscut budget has not been submitted. According to OMB officials, they have had internal conversations on the approach to develop the budget but have not requested information from agencies. A crosscut budget would help ensure Congress is better informed as it considers funding for Basin restoration efforts.

Map of the Columbia River Basin

Sources: U.S. Army Corps of Engineers; Map Resources (state borders). | GAO-18-561

United States Government Accountability Office

Action: Develop a Plan for Implementing the CRBRA

- Complement and enhance existing efforts:
  - BPA Fish and Wildlife Program
  - OWEB, OR, WA and ID Recovery Planning
  - Others
  - Focus on toxics should help
- Actions to reduce toxics will build on 2010 Action Plan
- Draft plan by 12/31/18
- Volunteers?

Action: Convene Columbia River Basin Restoration Working Group

- Membership is voluntary
- States, Tribes, Local Governments, Industries, Utilities, NGOs, landowners, others
- Draft proposal by 12/31/18
- Volunteers?

Next Steps

- Program Management Plan workgroup convenes
- Working Group convenes
- EPA begins developing grant guidance if needed
- Report out at next Working Group meeting
- Non-EPA Basin Wide Group continues work on Appropriations