May 21, 2025

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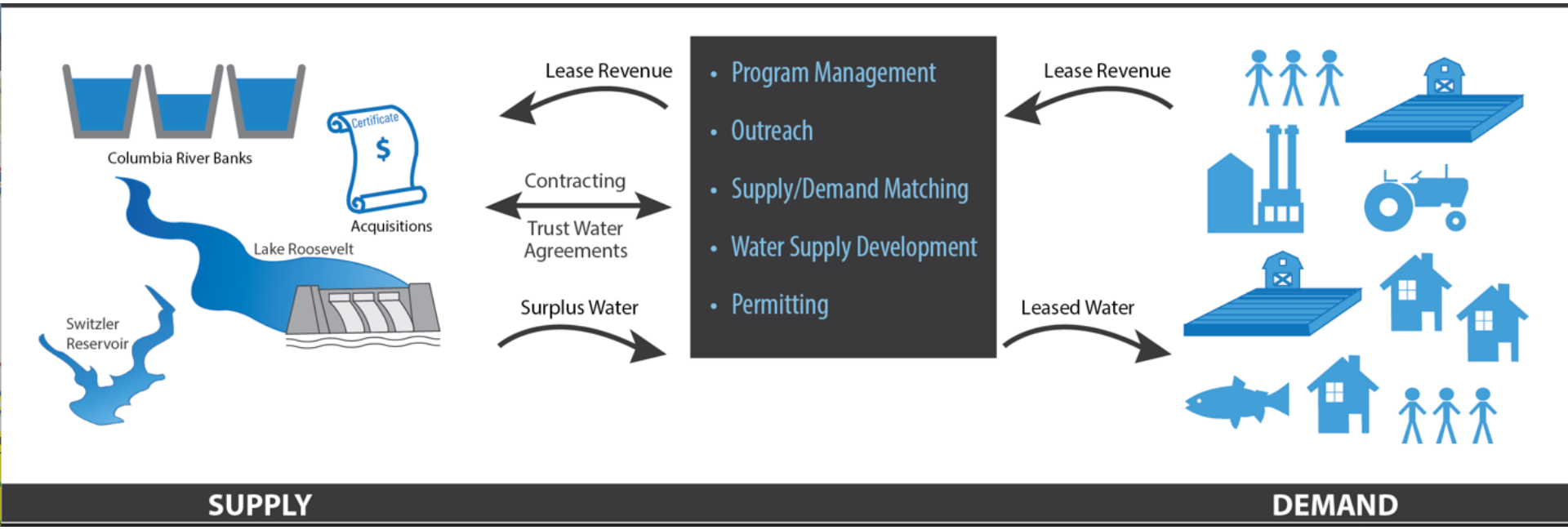
Drought Insurance Program Concept

Leveraging storage and water banks to meet drought needs



Why is OCR launching this program?

- OCR has a legislative mandate under RCW 90.90 to “aggressively pursue" water solutions that:
  - Reduce interruptible risk
  - Benefit fish, ecosystems, and recreation
  - Supply new agriculture, municipal, and industrial uses

COLUMBIA RIVER
DROUGHT INSURANCE PROGRAM
An Initiative of The Office of Columbia River

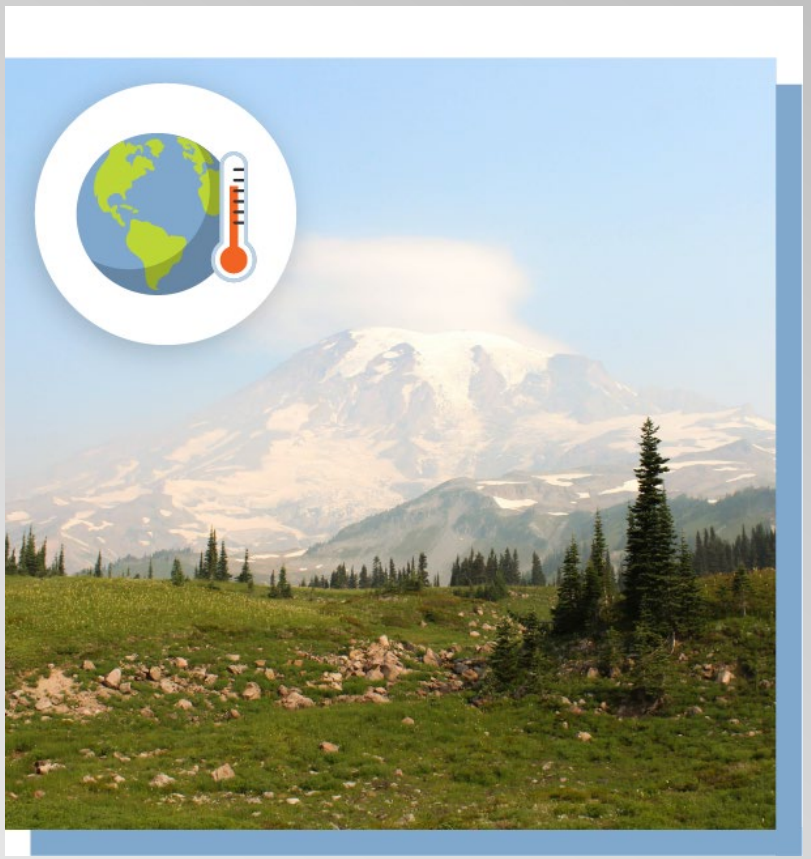
And OCR recognizes that…

- Today's farms use water more efficiently with
  - **advanced technology** and
  - **adaptive management**
- Water freed up by these practices can fulfill existing needs
  - If the savings are accurately tracked and managed
  - But not by using traditional permitting tools alone

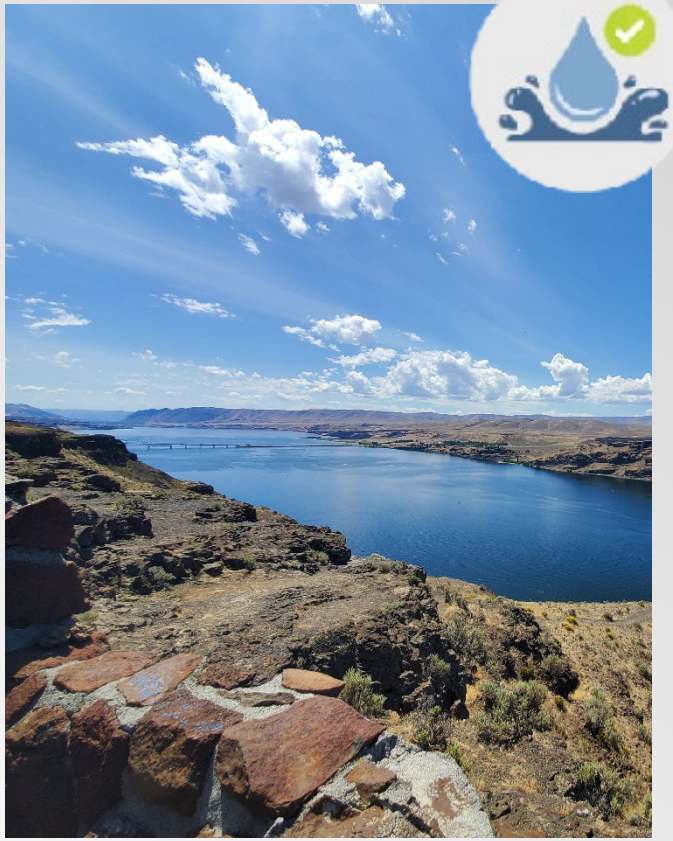
Achieving Ecology's Strategic Plan Objectives

- **Goal 2:**
  Reduce and prepare for climate impacts
  - Objective 2.2(B)

  "… improve water security, and develop water storage and supply solutions in Central and Eastern Washington watersheds."



Achieving Ecology's Strategic Plan Objectives



Goal 4:
Protect and manage our state's waters

- Objective 4.1

"Increase water availability in the Columbia River Basin for municipal, domestic, and agricultural purposes and promote water exchanges, improved efficiencies, and alternative water supplies."

Supporting Ecology's vision and mission

Our Mission

To protect, preserve, and enhance Washington's environment for current and future generations.

Our Vision

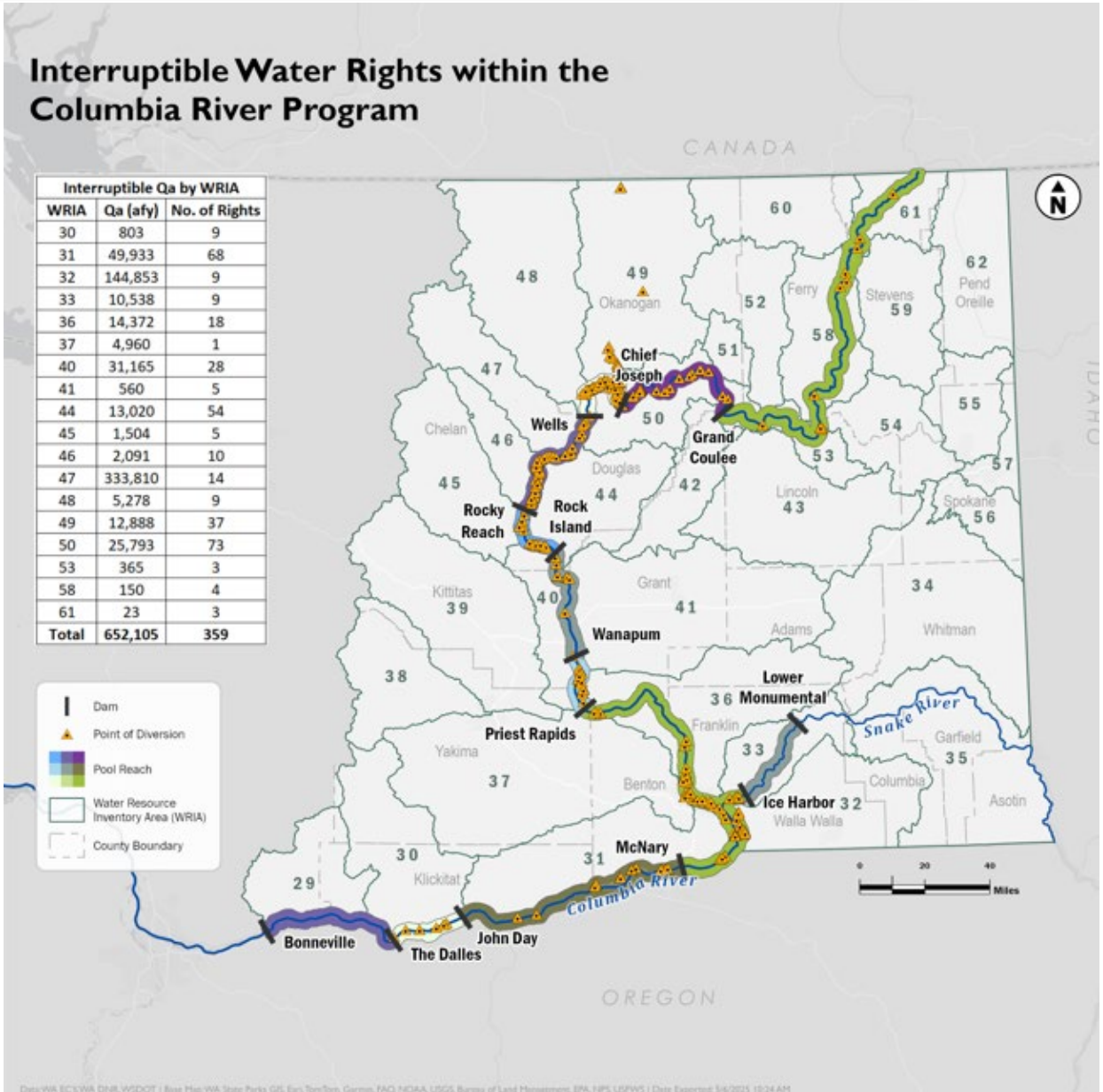
Our innovative partnerships protect and sustain healthy land, air, and water in harmony with a strong economy.

Columbia River Instream Flow Rule

- **Chapter 173-563 WAC**
  - **Adopted June 24, 1980**
  - **Set instream flow targets between Grand Coulee Dam and Bonneville Dam**
- **March 1st forecast each year**
  - **If < 60 million acre-feet, rule is triggered**
  - **Interruptible rights curtailed when flows not met**

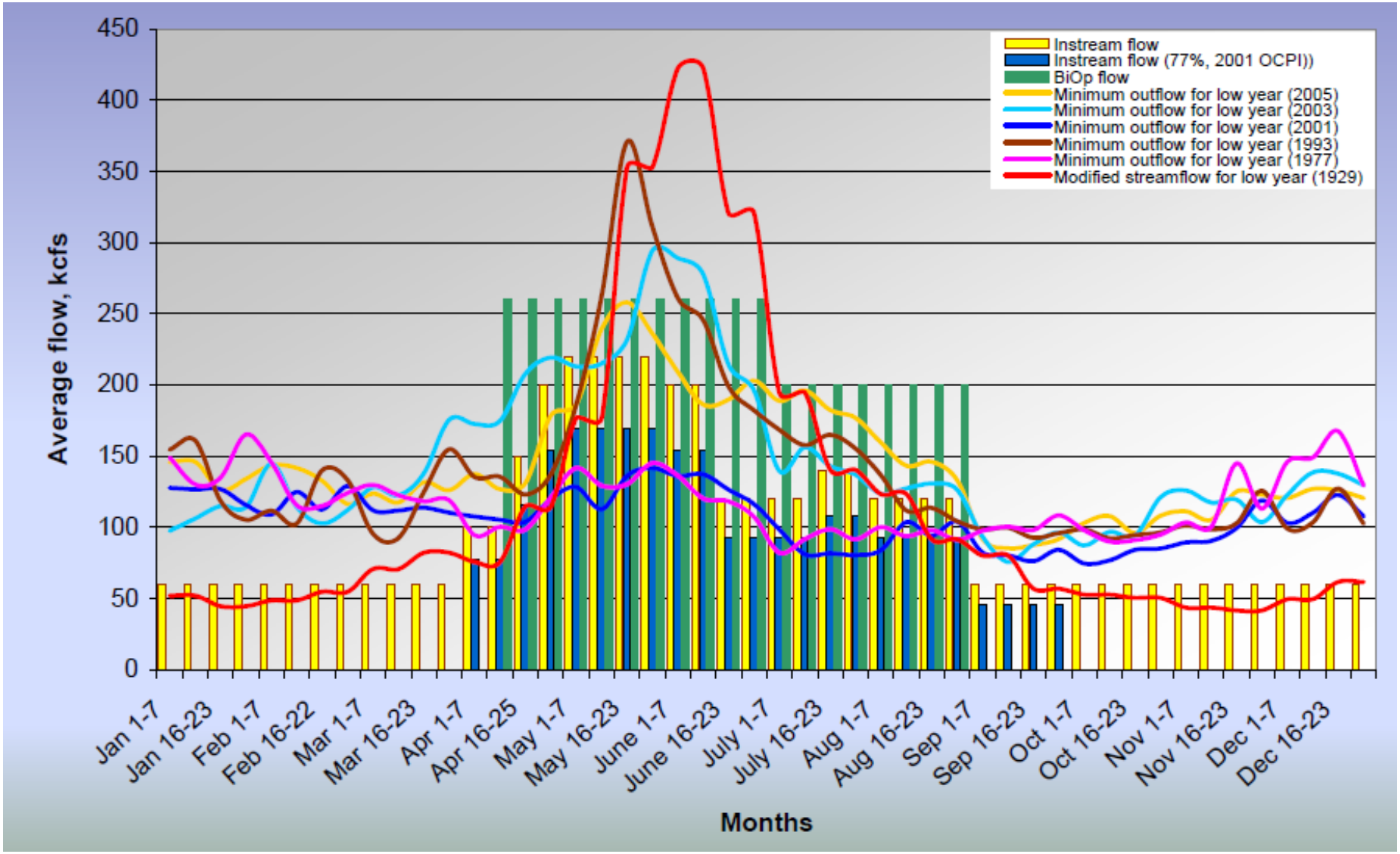
Who Needs Mitigation?

- Approx. 350-400 water rights
- Totaling roughly 650,000 ac-ft



Interruptible Qa by WRIA		
WRIA	Qa (afy)	No. of Rights
30	803	9
31	49,933	68
32	144,853	9
33	10,538	9
36	14,372	18
37	4,960	1
40	31,165	28
41	560	5
44	13,020	54
45	1,504	5
46	2,091	10
47	333,810	14
48	5,278	9
49	12,888	37
50	25,793	73
53	365	3
58	150	4
61	23	3
Total	652,105	359

How Did This Work at McNary (For Example)?



What Mitigation Does OCR Have "In Hand"?

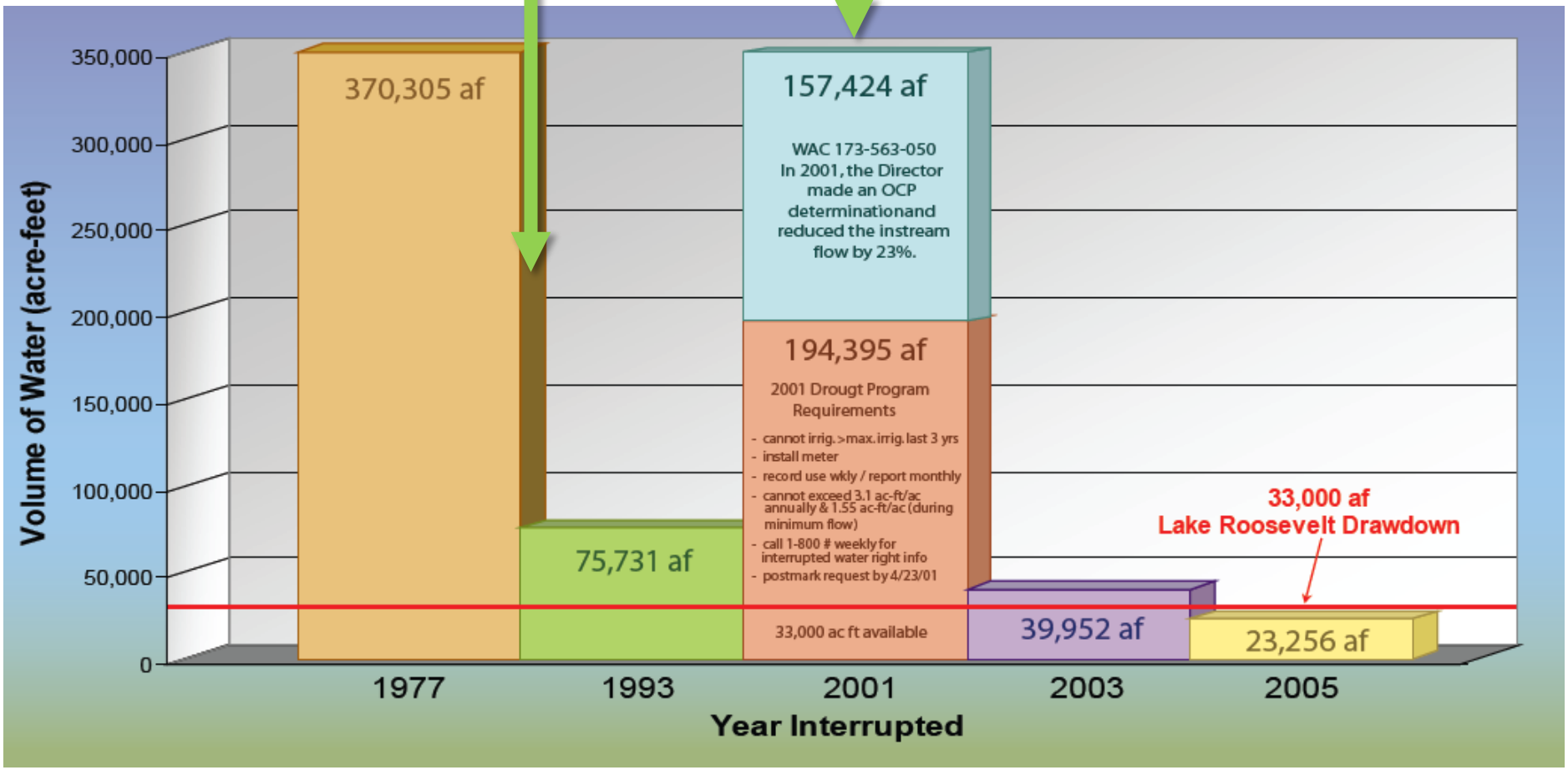
- **Lake Roosevelt** – 33,000 acre-feet
  (needs in-year drought authorization from Reclamation)
- **Acquisitions** – ~1,000 acre-feet (in-hand)
- **Switzler** – EIS being evaluated (~40,000 ac-ft)
- **Multiple Bank Agreements** **(pending)** – ~30,000+ ac-ft

Available Mitigation vs. Past Droughts

1980 Rule Adoption

2001, Only Year Program "Triggered" although 1977 & 2001 very "close"

Frequency?
1:44 (official)
3:47 (almost!)



What is Magnitude of Need?

- **Total interruptibles** – ~650,000 acre-feet
  (every week interrupted, never occurred to-date)
- **Self-solved** – some interruptibles reduced risk through changes
- **What if 11 weeks of drought as in 2001?**
  - **With an adjustment** ~200,000 acre-feet
  - **Without an adjustment** ~350,000 acre-feet
- **Unmet demand** – ~170,000 to ~320,000 acre-feet
  (assuming full participation, but economics and desire unknown)

This Drought Program is a New Tool

- **Could you buy 320,000 ac-ft? Hard.**
  – 320,000 ac-ft x ~$3,000/ac-ft is $960 million dollars

- **Can you store it? Hard.** – 320,000 ac-ft is like another major Yakima reservoir. Storage is controversial.

- **An opportunistic drought program has no capital outlay for OCR.** – While there are permitting and tracking obligations, this new tool would not cost OCR any capital.

- **Beneficiaries would share in the cost.** – It also meets OCR's local cost-share goals by the users who will receive benefit.

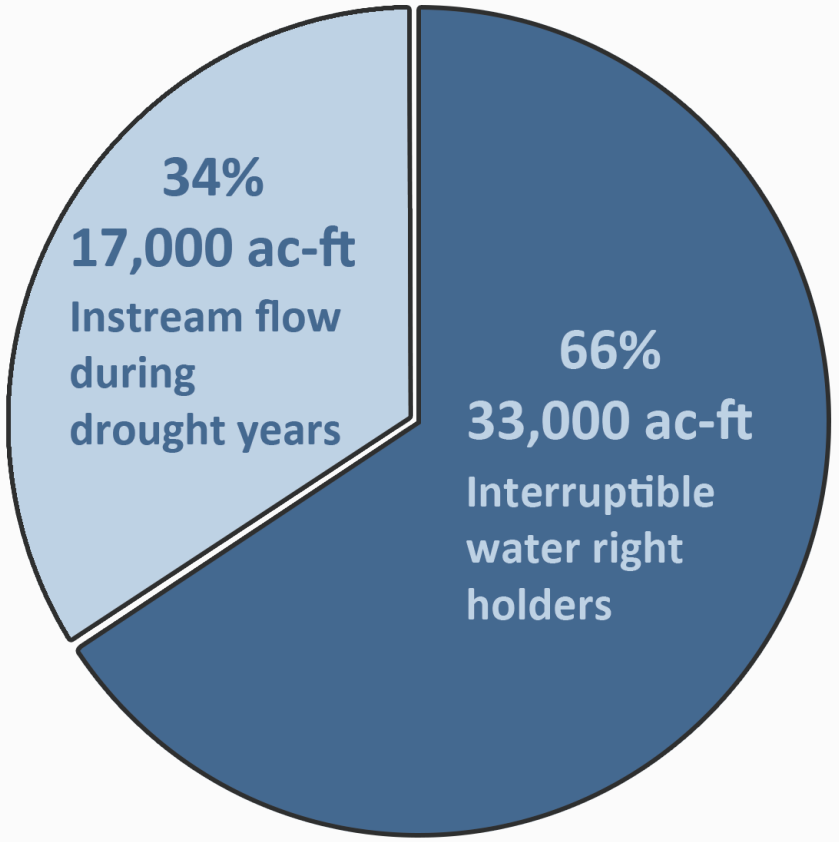
Where Else Could Supply Come From?

Only real bird in hand currently is Lake Roosevelt

Lake Roosevelt Drawdown: 33,000 acre-feet

Lake Roosevelt Releases in Drought Years

- If Apr–Sept forecast ≥ 60 MAF, 33,000 a-f becomes available to help interruptible water users
- Final Supplemental EIS had 3 preferred alternatives for distributing that water:
  - Even Distribution Allocation
  - Market-Based Allocation
  - Voluntary Enrollment
- The preferred method would provide Ecology with the maximum flexibility in meeting the goal of the program



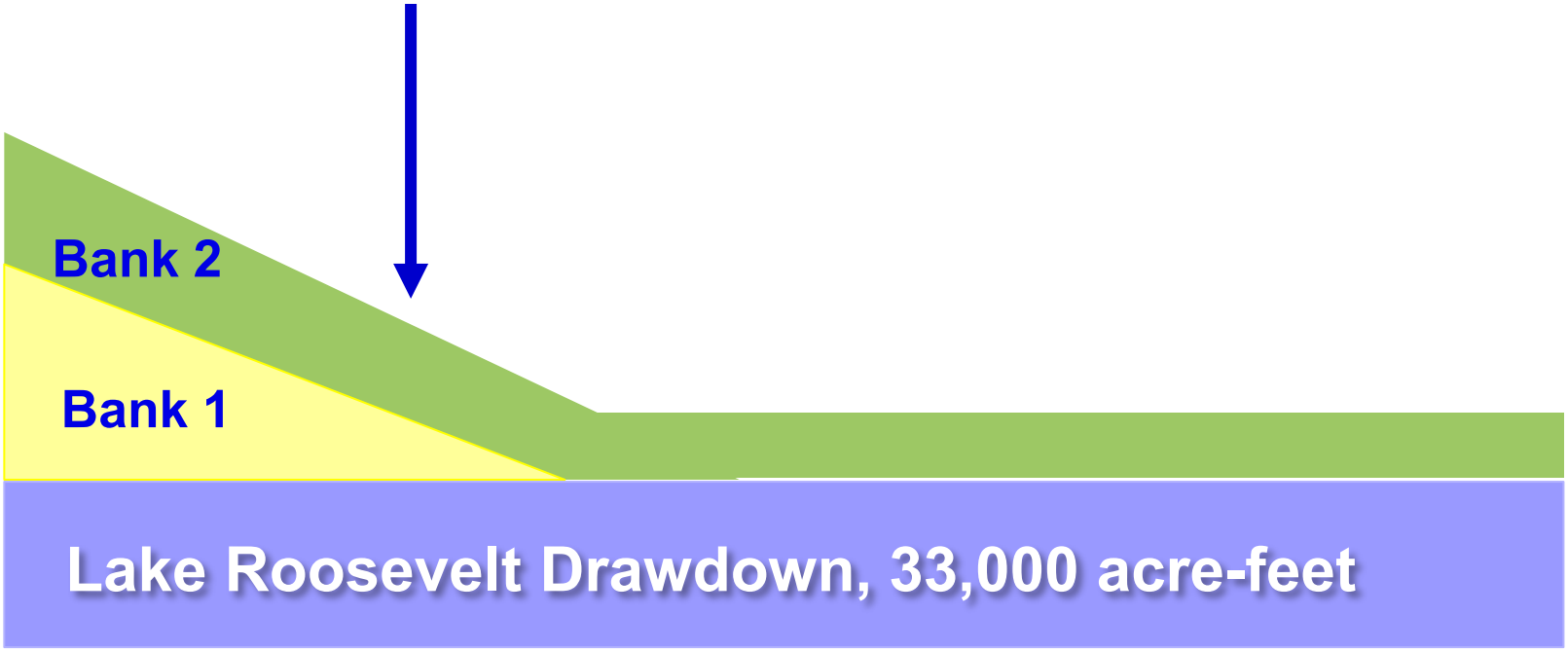
Additional 50,000 from Lake Roosevelt released during drought years

Building Drought Insurance Program

- Each bank will have unique terms based on what OCR and the bank agree to.
- Example bank 1 provides certainty initially, with declining availability as trust assets are deployed.
- But it doesn't cost OCR any capital—only permitting cost.

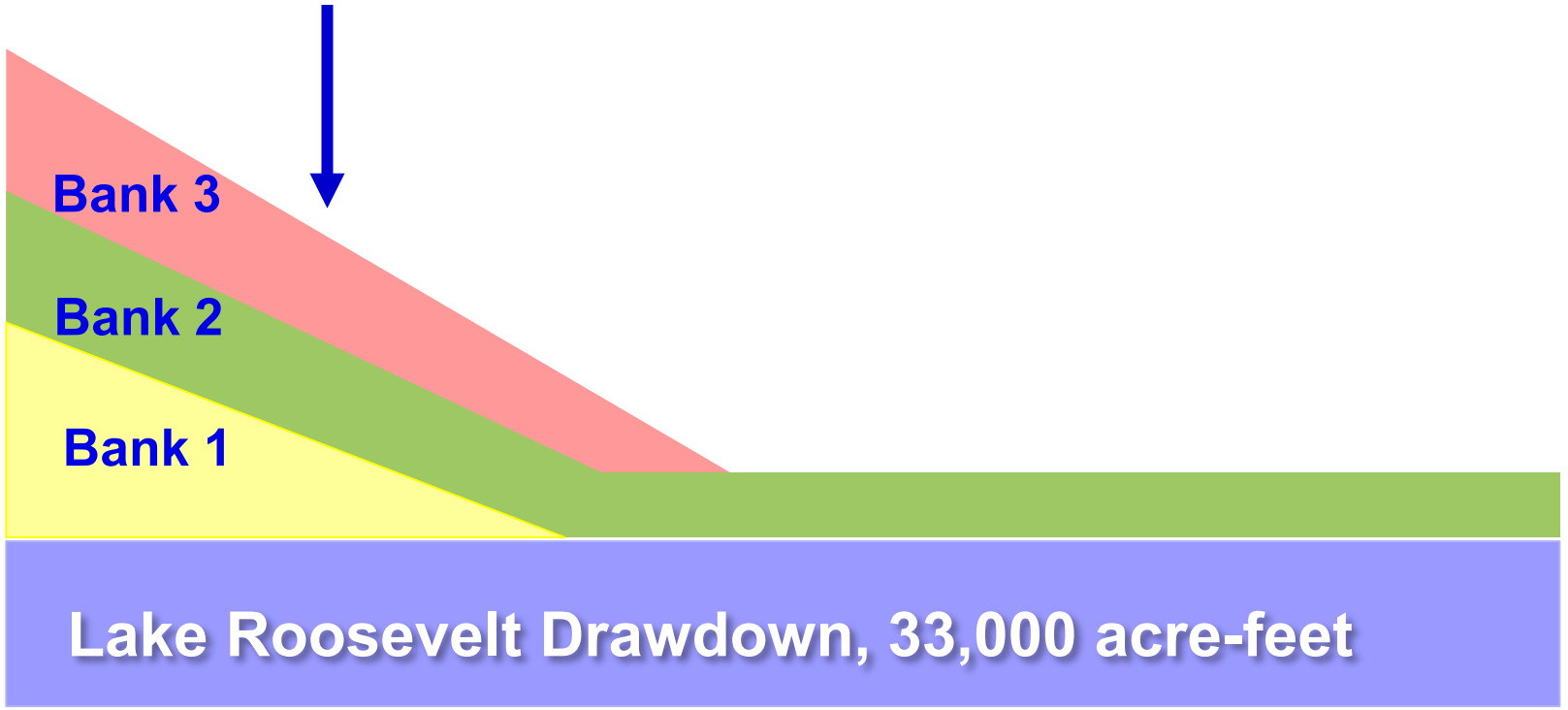
Building Drought Insurance Program

- OCR is negotiating with multiple banks
- Additional sources will likely come on-line over time
- Example Bank 2 also includes an acquisition



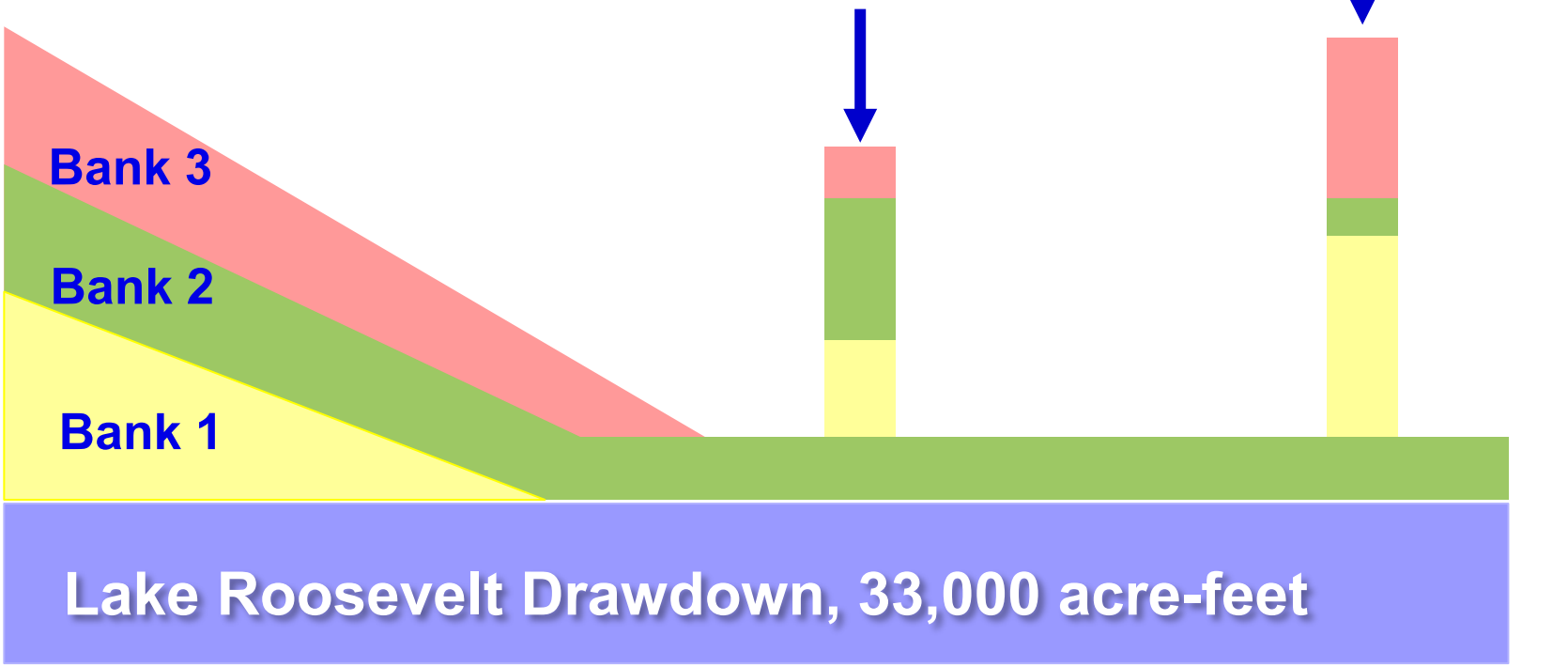
Building Drought Insurance Program

- Example Bank 3 adds more capacity in the near-term



Building Drought Insurance Program

- There is likely surplus water in the system during drought years (there are transactions even without significant facilitation by OCR)
- Some use it for fear of relinquishment
- Some don't use it but only donate it for fish
- Opportunistic leasing in drought years is likely based on historic practices



A Pathway for Success

1. Investigate and Assess Interruptible Water Rights

- Update list of interruptible water rights
- Collect contact information
- Determine eligibility, such as spatial ability to access mitigation supply

2. Analyze Demographics

- Summarize water right attributes
- Assess likelihood of participation in drought insurance program

3. Create Web Presence

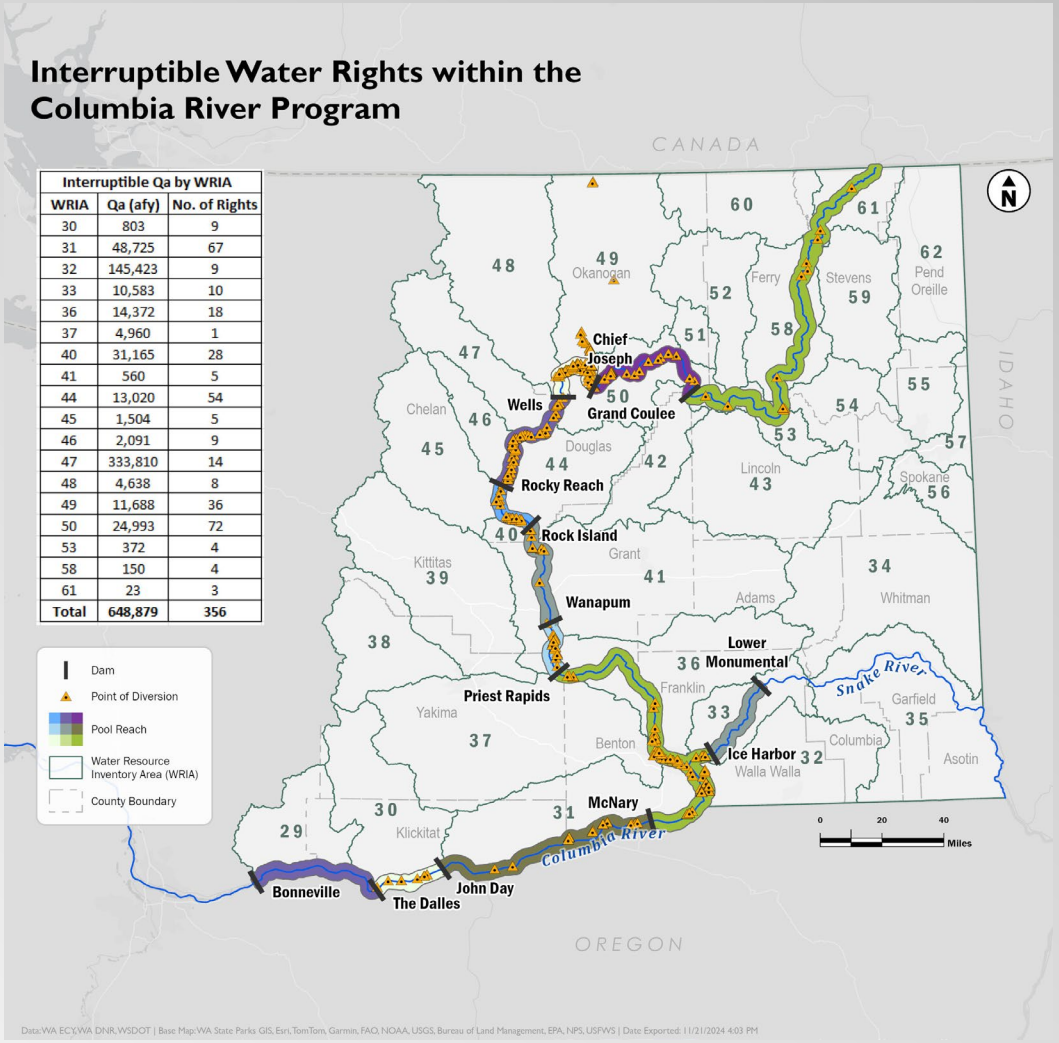
- Provide information to public

4. Perform Outreach

- Engage with Interruptible Water Right holders

Investigate Interruptible Water Rights

- **Update interruptible database** – contacting a group of users that have had no outreach since 2001
- **Over 350 Water Rights**



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50	24,993	72
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58	150	4
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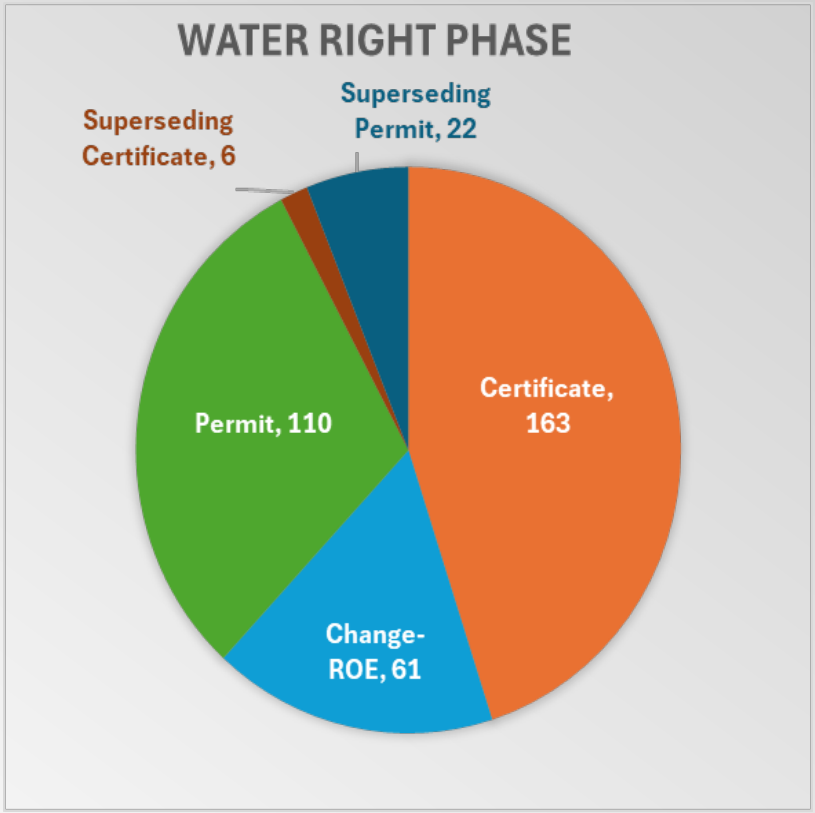
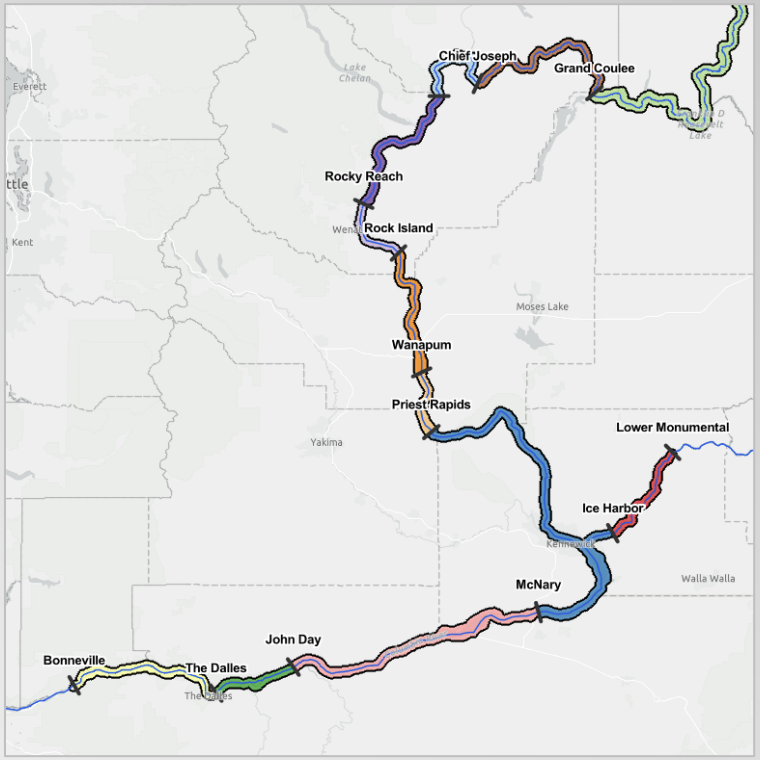
Total	648,879	356

Analyze Demographics



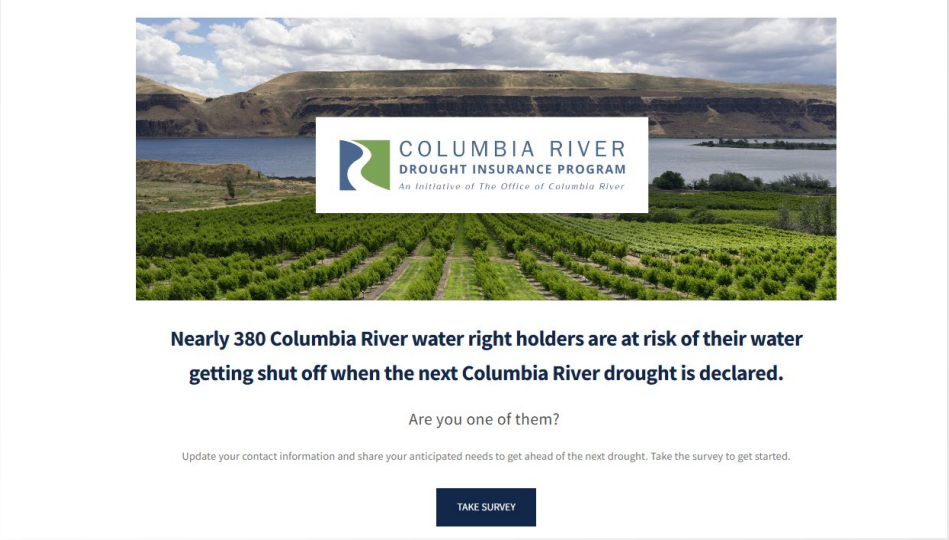
- **Determine Mitigation Pool Reach**
- **Identify Drought Risk** – field crops vs. specialty crops

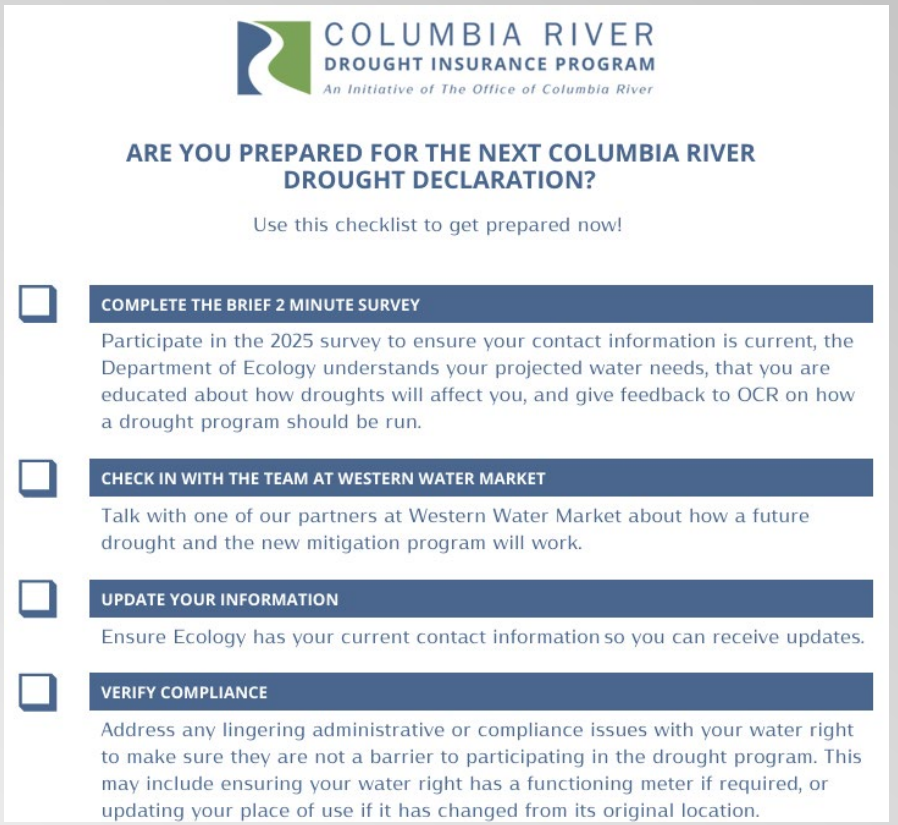


- **Diagnose water right administrative issues that could be barriers to drought permitting** – permit assignments, CWREs, divisions, changes, donations

Create Web Presence

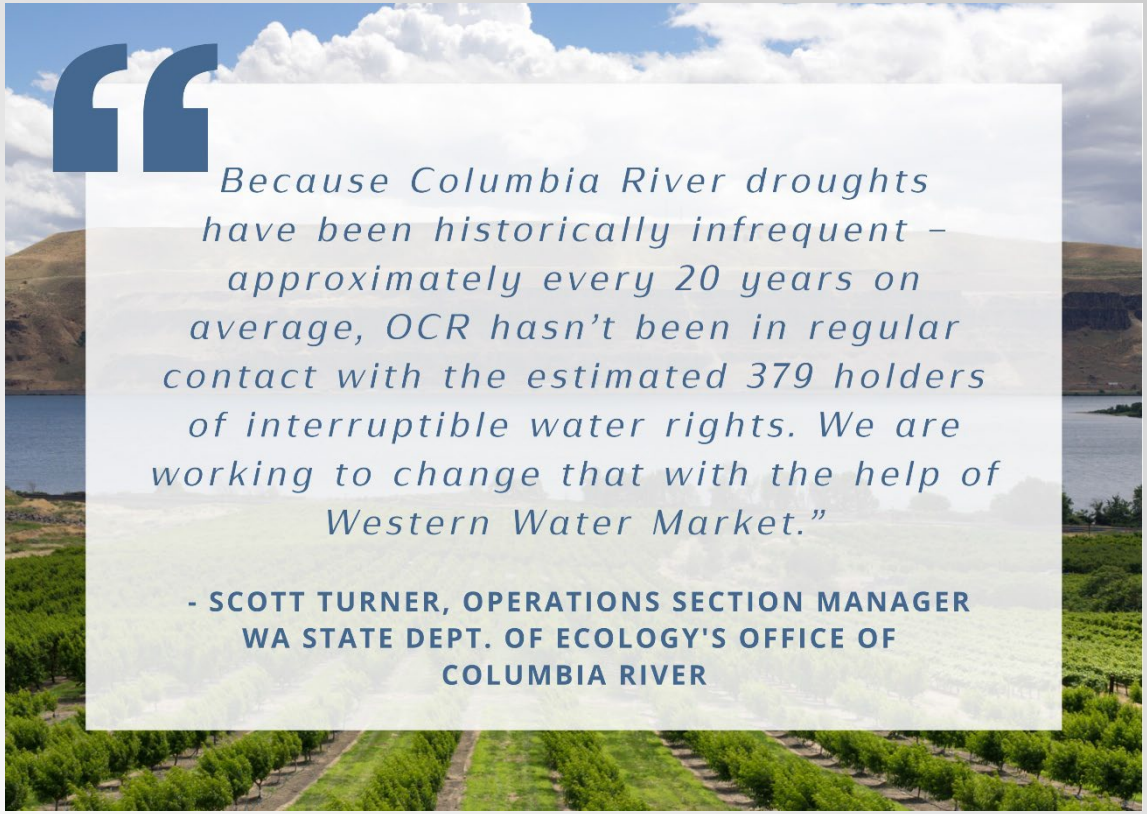
- **Western Water Market Portal** – web page to host information, coordinated with OCR, information on forecasting, address updates, technical assistance
- **2-Minute Survey and Checklist**
- **Frequently Asked Questions**
- **Other Resouces** – Podcast, Links





Perform Outreach

- **The need for outreach** – make initial contact, willingness to participate, pay-to-play sensitivity, technical assistance



Program Design

- **Update interruptible database** – contacting a group of users that have had no outreach since 2001
- **Diagnose water right administrative issues that could be barriers to drought permitting** – permit assignments, CWREs, divisions, changes, donations
- **Western Water Market Survey** – Frontline ambassador for initial contact, willingness to participate, pay-to-play sensitivity, technical assistance
- **Western Water Market Portal** – web page to host information, coordinated with OCR, information on forecasting, address updates, technical assistance
- **Program Design** – OCR workshop on feedback, types of needs, communicate via legislative report, Policy Advisory Group

Setting the Stage for Success

- **Step 1** – Water right holder submits a form Request to Establish or Modify a Water Bank
- **Step 2** – OCR and water right holders work together to
  - Determine if the rights are a good fit
  - Formally agree on a pathway toward enrollment
    - In a written MOU (Memorandum of Understanding)

Working Together

- **Once the rights are determined to be a good fit for the program, the parties will cooperate to:**
  - Create a virtual platform for collaboration
  - Make and execute a plan to resolve any water right administrative issues prior to applications being filed
  - Create a schedule for regular team check-in meetings
  - Establish a protocol for ongoing regular communication

Learn more

SCAN THE CODE

Update your contact information and take the brief online survey at: www.westernwatermarket.com/columbia-drought-solutions

SCAN THE CODE

Search for your water right documents at: www.ecology.wa.gov/regulations-permits/guidance-technical-assistance/water-rights-search

CONNECT WITH WESTERN WATER MARKET AT: WWW.WESTERNWATERMARKET.COM

Questions?