

CURRENT ISSUES IN CALIFORNIA WATER MANAGEMENT

WATER EDUCATION FOUNDATION

WATER 101

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STATE WATER RESOURCES CONTROL BOARD





HOT ISSUES INDEED: A LOT GOING ON!

- **GOVERNOR'S WATER RESILIENCE PORTFOLIO**
- **CLEAN, SAFE & AFFORDABLE DRINKING WATER**
- **SUSTAINABLE GROUNDWATER MANAGEMENT**
- **DELTA FISH & WILDLIFE**
- **WATER BONDS**
- **JUST TO NAME A FEW!**



2020 WATER RESILIENCE PORTFOLIO

In Response to the Executive Order N-10-19

GOVERNOR'S WATER RESILIENCE PORTFOLIO

- HISTORY
- ROADMAP
- COMMENTS TAKEN THROUGH
FEB 7, 2020



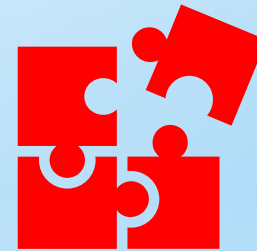
● **“IT IS HEREBY ORDERED THAT:**

The **California Natural Resources Agency**, the **California Environmental Protection Agency**, the **California Department of Food and Agriculture**, in consultation with the Department of Finance, shall together prepare a water resilience portfolio that meets the needs of California’s communities, economy, and environment through the 21st century.... These agencies will identify key priorities for the administration’s water portfolio moving forward, and identify how to improve integration across state agencies to implement these priorities.

Governor Newsom, Executive Order N-10-19

WRP ORGANIZATION: 5 BIG AREAS

- MAINTAIN AND DIVERSIFY WATER SUPPLIES (PROPOSALS 1– 8)
- PROTECT AND ENHANCE NATURAL SYSTEMS (PROPOSALS 9 – 18)
- BUILD CONNECTIONS (PROPOSALS 19 – 24)
- BE PREPARED (PROPOSALS 25 – 27)
- EXECUTE THE PORTFOLIO (PROPOSALS 28 – 32)



MAINTAIN AND DIVERSIFY WATER SUPPLIES

1. ACHIEVE RELIABLE ACCESS TO SAFE AND AFFORDABLE WATER
2. DRIVE GREATER WATER USE EFFICIENCY IN ALL SECTORS
3. SUPPORTING GROUNDWATER TRANSITION TO SUSTAINABLE USE
4. RECYCLE OR REUSE 2.5 MAF OF WATER IN THE NEXT 10 YEARS
5. SUPPORT STORMWATER CAPTURE FOR CITIES AND TOWNS
6. ENABLE COST-EFFECTIVE/ENVIRONMENTALLY SENSITIVE DESAL
7. EXPAND STORAGE FOR BOTH WATER SUPPLY & THE ENVIRONMENT
8. PROTECT AND RESTORE WATER QUALITY BY DRIVING POLLUTION REDUCTION



PROTECT AND ENHANCE NATURAL SYSTEMS

9. PROTECT WILDLIFE WITH TOOLS TO QUANTIFY TIMING, QUALITY, AND VOLUME OF FLOWS
10. RECONNECT AQUATIC HABITAT TO HELP FISH & WILDLIFE ENDURE DROUGHT & ADAPT TO CLIMATE CHANGE
11. SUPPORT WETLAND EXPANSION TO CREATE HABITAT, FILTER RUNOFF, BUFFER FLOODS & RECHARGE GROUNDWATER
12. CURB INVASIVE SPECIES
13. SIMPLIFY PERMITTING FOR MORE MULTI-BENEFIT/MULTI-PARTNER PROJECTS
14. UPGRADE AND MAINTAIN STATE WILDLIFE REFUGES, HATCHERIES, & RESTORATION AREAS
15. ENCOURAGE INVESTMENTS IN UPPER WATERSHEDS
16. IMPROVE SOIL HEALTH
17. SALTON SEA: MINIMIZE AIR POLLUTION AND RESTORE HABITAT
18. SACRAMENTO SAN-JOAQUIN DELTA: PROTECT ECONOMIC AND ECOLOGICAL VITALITY



BUILD CONNECTIONS



19. MODERNIZE INTER-REGIONAL CONVEYANCE
20. SUPPORT INTEGRATED REGIONAL WATER RESILIENCE STRATEGIES
21. SIMPLIFY WATER TRANSFERS
22. MODERNIZE WATER DATA SYSTEMS
23. COORDINATE SCIENCE CRUCIAL TO WATER MANAGEMENT
24. FOSTER WATER INNOVATION AND TECHNOLOGY ADOPTION

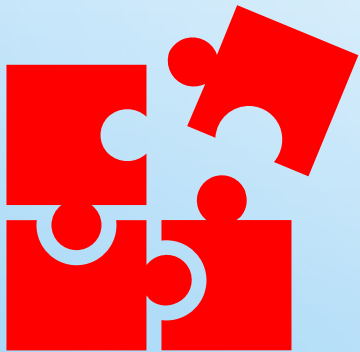
BE PREPARED

25. HELP REGIONS PREPARE FOR NEW FLOOD PATTERNS
26. HELP REGIONS PREPARE FOR INEVITABLE DROUGHT
27. SHARPEN THE ABILITY OF REGIONS TO ANTICIPATE WEATHER AND CLIMATE CHANGES



EXECUTE THE PORTFOLIO

28. INSTITUTIONALIZE BETTER COORDINATION ACROSS STATE AGENCIES
29. PARTNER WITH KEY NON-STATE PARTNERS
30. UNIFY TO PURSUE FEDERAL FUNDING AND COOPERATION
31. ACTIVELY INTEGRATE WATER RESILIENCE PORTFOLIO ACTIONS INTO OTHER ADMINISTRATION EFFORTS TO BUILD CLIMATE RESILIENCE
32. TRACK AND REPORT ANNUALLY AND PUBLICLY ON WRP IMPLEMENTATION PROGRESS



“WHAT CAN OUR WATER FUTURE LOOK LIKE IF WE SUCCEED?”

ALL CALIFORNIANS HAVE SAFE AND CLEAN DRINKING WATER. OUR NATIVE FISH POPULATIONS RECOVER. RELIABLE WATER HELPS TRIBAL GOVERNMENTS, RURAL COMMUNITIES AND AGRICULTURE THRIVE. CITIES AND TOWNS GROW WHILE USING WATER EFFICIENTLY. WE CAPTURE, USE, AND SHARE WATER SUPPLIES TO WEATHER DROUGHTS. OUR COMMUNITIES ARE SAFE FROM FLOOD RISKS. AND WE ADAPT TOGETHER TO CHANGES THROUGH COLLABORATIVE, SCIENCE-BASED MANAGEMENT AND STRONG PARTNERSHIPS.”

PROPOSAL 1.1 SAFE DRINKING WATER

- 95% OF CALIFORNIANS HAVE ACCESS TO SAFE AFFORDABLE DRINKING WATER
- BUT 1 MILLION CALIFORNIANS IN COMMUNITIES ACROSS THE STATE STILL LACK SUCH A BASIC NEED
- IN 2014 THE LEGISLATURE TRANSFERRED THE DRINKING WATER PROGRAM FROM THE DEPARTMENT OF HEALTH TO THE STATE WATER BOARD
- SINCE 2014, THE BOARD HAS:
 - ✓ BROUGHT 275 SYSTEMS THAT WERE FAILING TO DELIVER SAFE DRINKING WATER BACK INTO COMPLIANCE.
 - ✓ TAKEN ACTIONS THAT LED TO THE CONSOLIDATION OF OVER 100 FAILING - OR LIKELY TO FAIL - WATER SYSTEMS.
 - ✓ HELPED MORE THAN 200 SMALL DISADVANTAGED COMMUNITIES SECURE FUNDING FOR PROJECT PLANNING AND CONSTRUCTION THROUGH OUR OFFICE OF SUSTAINABLE WATER SOLUTIONS.

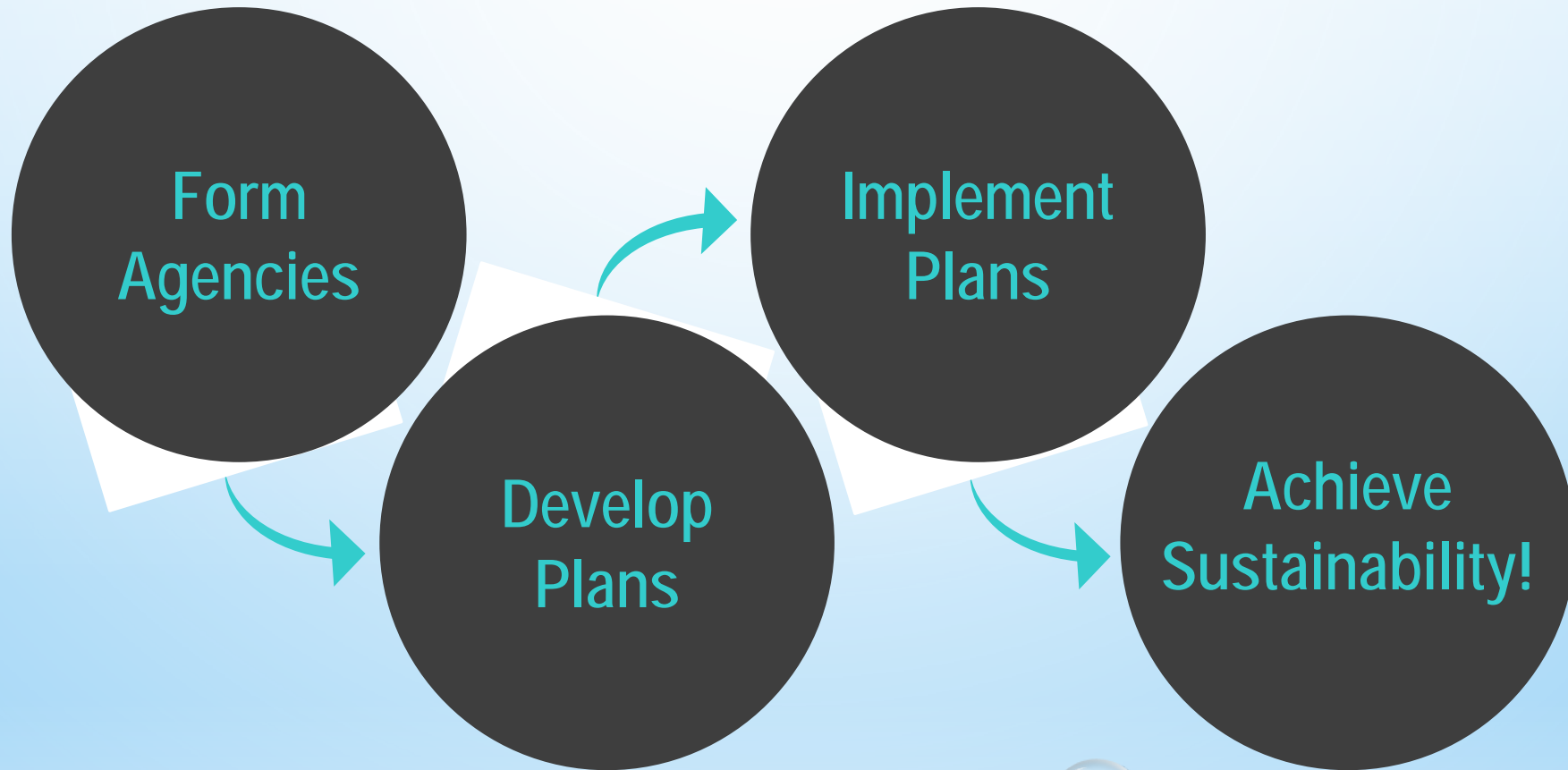
SB 200: “SAFER” NEXT STEPS

- SENATE BILL 200 (SB 200) ESTABLISHES A SAFE AND AFFORDABLE DRINKING WATER FUND TO CLOSE THE FUNDING GAP AND ADDRESS THE CRISIS
- PROVIDES \$130 MILLION ANNUALLY FOR 10 YEARS TO ENABLE THE STATE WATER BOARD TO PROVIDE CRITICAL, ONGOING OPERATIONS AND MAINTENANCE SUPPORT FOR SMALL COMMUNITY WATER SYSTEMS THAT ARE UNABLE TO MEET SAFE DRINKING WATER STANDARDS.
- CREATION OF THE NEW “SAFE AND AFFORDABLE FUNDING FOR EQUITY AND RESILIENCY” (SAFER) 19-MEMBER ADVISORY GROUP TO HELP GUIDE IMPLEMENTATION OF THE FUND
- \$360 MILLION IN THE GOVERNOR’S CLIMATE RESILIENCE BOND FOR SAFE DRINKING WATER

PROPOSAL 3.1: CONTINUE IMPLEMENTATION OF SGMA

- THE SUSTAINABLE GROUNDWATER MANAGEMENT ACT (WAT. CODE, § 10720 ET SEQ.)
- APPLIES TO HIGH AND MEDIUM PRIORITY GROUNDWATER BASINS IN CALIFORNIA.
- ALLUVIAL BASINS THAT THE CALIFORNIA DEPARTMENT OF WATER RESOURCES HAS RANKED UNDER THE CASGEM PROGRAM AND DETERMINED ARE THE MOST RELIED UPON
- TOGETHER THESE BASINS AND SUBBASINS (SGMA DOESN'T DISTINGUISH) ACCOUNT FOR ABOUT 95% OF ALL GROUNDWATER PUMPED IN CALIFORNIA
- THE ACT EXEMPTS ADJUDICATED BASINS FROM MOST PROVISIONS EXCEPT REPORTING

SGMA Basics



REQUIREMENTS OF SGMA

- LOCAL PUBLIC AGENCIES – MEANING LOCAL AGENCIES WITH WATER SUPPLY, WATER MANAGEMENT, OR LAND USE RESPONSIBILITIES WITHIN GW BASINS SUBJECT TO THE ACT – MUST FORM GROUNDWATER SUSTAINABILITY AGENCIES (GSAs)
- GSAS ARE RESPONSIBLE FOR DEVELOPING AND IMPLEMENTING GROUNDWATER SUSTAINABILITY PLANS (GSPs)
- PLANS MUST USE A 50-YEAR PLANNING HORIZON AND ACHIEVE SUSTAINABILITY WITHIN 20 YEARS
- ACT ALLOWED LOCAL PUBLIC AGENCIES CLAIMING TO HAVE BEEN SUSTAINABLE OVER A PERIOD OF AT LEAST 10 YEARS TO SUBMIT EXISTING PLANS AS AN “ALTERNATIVE THAT MEETS SGMAS OBJECTIVES” FOR THE BASIN

(DWR ACCEPTED SOME AND REJECTED SOME LAST YEAR)

LOCALS MUST AVOID UNDESIRABLE RESULTS



“UNDESIRABLE RESULTS” DEFINED AS ONE OR MORE OF THE FOLLOWING:

(1) CHRONIC LOWERING OF GROUNDWATER LEVELS ...

(2) SIGNIFICANT AND UNREASONABLE REDUCTION OF GROUNDWATER STORAGE

(3) SIGNIFICANT AND UNREASONABLE SEAWATER INTRUSION

(4) SIGNIFICANT AND UNREASONABLE DEGRADED WATER QUALITY, INCLUDING THE MIGRATION OF CONTAMINANT PLUMES THAT IMPAIR WATER SUPPLIES

(5) SIGNIFICANT AND UNREASONABLE LAND SUBSIDENCE THAT SUBSTANTIALLY INTERFERES WITH SURFACE LAND USES

(6) DEPLETIONS OF INTERCONNECTED SURFACE WATER THAT HAVE SIGNIFICANT AND UNREASONABLE ADVERSE IMPACTS ON BENEFICIAL USES OF THE SURFACE WATER.

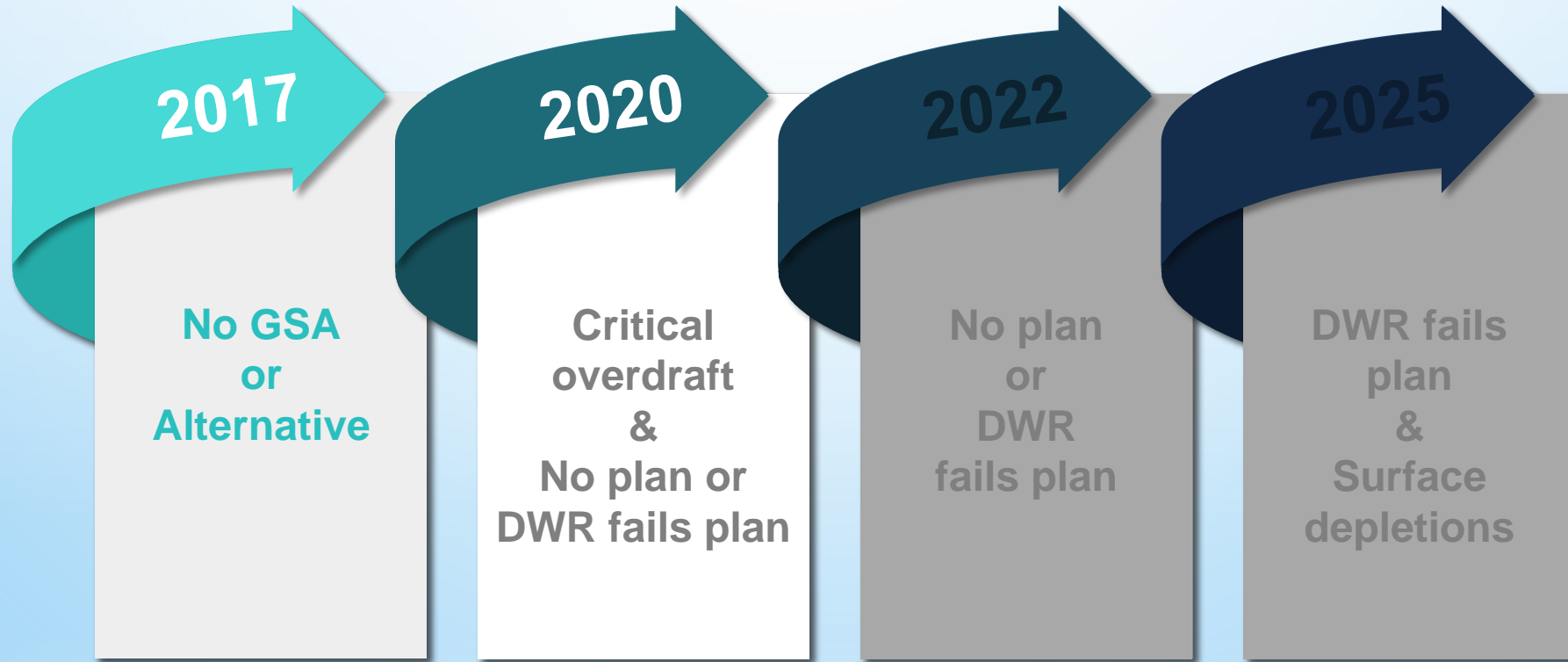
Board Backstop



- THE BACKSTOP FOR SGMA IS A **PROBATIONARY BASIN** DESIGNATION BY THE BOARD
- THE BOARD ONLY STEPS IN IF THE LOCAL EFFORTS FAIL
- THE BOARD TEMPORARILY PROTECTS THE BASIN UNTIL THE LOCALS COME UP TO SPEED
- THE BACKSTOP IS TRIGGERED BY MISSED DEADLINES OR INADEQUATE IMPLEMENTATION



TRIGGERING the BACKSTOP



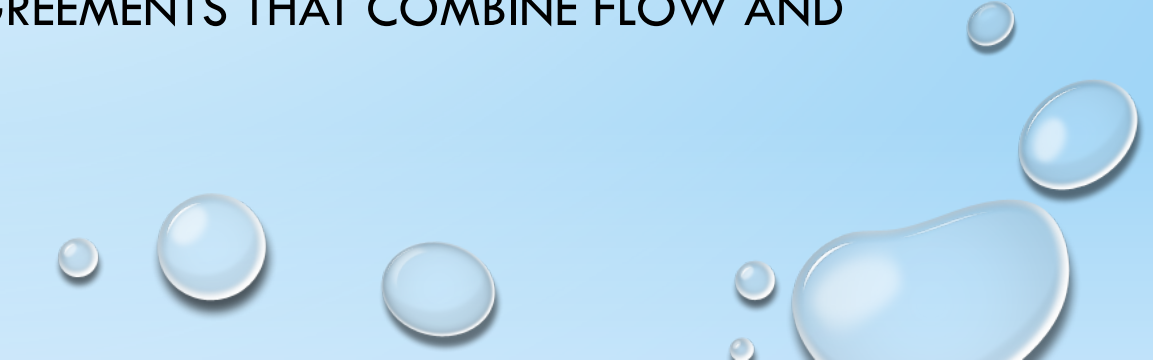
UNIMPAIRED FLOW & VOLUNTARY AGREEMENTS: TWO APPROACHES TO IMPROVING RIVER FUNCTIONS

- STATE WATER BOARD ADOPTED 40% UNIMPAIRED FLOW ON THE LOWER SAN JOAQUIN RIVER IN A RANGE OF 30-50%
- STAFF PROPOSED 55% UF FOR THE SACRAMENTO/DELTA WATERSHED IN A RANGE OF 45-65%
- VOLUNTARY AGREEMENTS PROPOSE COMBINATION OF FLOW AND NON-FLOW MEASURES



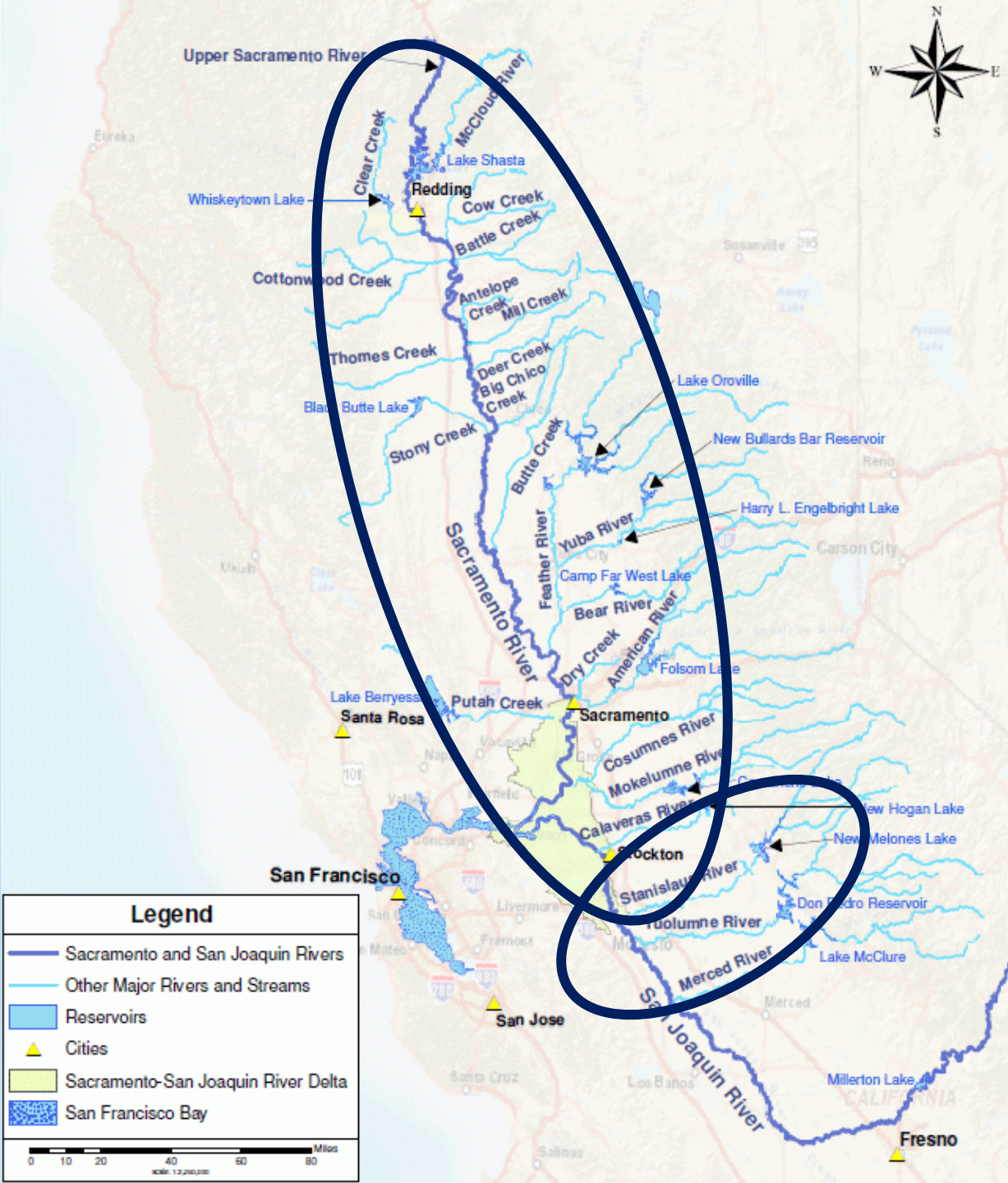


PROPOSAL 18.1: COMPLETE THE BAY-DELTA PLAN UPDATE

- THE WATER QUALITY CONTROL PLAN FOR THE SAN FRANCISCO BAY/SACRAMENTO-SAN JOAQUIN DELTA ESTUARY
 - REQUIRES UPDATED OBJECTIVES FOR FISH & WILDLIFE BENEFICIAL USES IN THE SACRAMENTO RIVER WATERSHED AND DELTA AND A PROGRAM OF IMPLEMENTATION TO IMPLEMENT THOSE OBJECTIVES
 - WILL REQUIRE GREATER INSTREAM FLOWS
 - COULD BE IMPLEMENTED THROUGH VOLUNTARY AGREEMENTS THAT COMBINE FLOW AND NON-FLOW MEASURES
- 

WHAT IS A WATER QUALITY CONTROL PLAN?

- THE STATE WATER BOARD ADOPTS WQCPS UNDER THE PORTER-COLOGNE WATER QUALITY CONTROL ACT (OUR STATE ACT WHICH PREDATES THE FEDERAL CLEAN WATER ACT)
- THE STATE WATER BOARD IS ALSO THE DESIGNATED WATER POLLUTION CONTROL AGENCY UNDER THE FEDERAL CLEAN WATER ACT (CALIFORNIA WAS THE FIRST STATE SO DESIGNATED)
- ANY *WATER QUALITY STANDARDS* INCLUDED IN THE PLAN MUST BE SUBMITTED TO THE U.S. ENVIRONMENTAL PROTECTION AGENCY FOR APPROVAL
- THE STATE WATER BOARD ADOPTED A BAY-DELTA PLAN UPDATE FOR THE LOWER SAN JOAQUIN RIVER DECEMBER 2018



San Francisco Bay-Delta Watershed

Bay-Delta Plan Updates

Lower San Joaquin River

Sacramento River Delta
Eastside Tributaries

WHY IS THIS SO HARD?

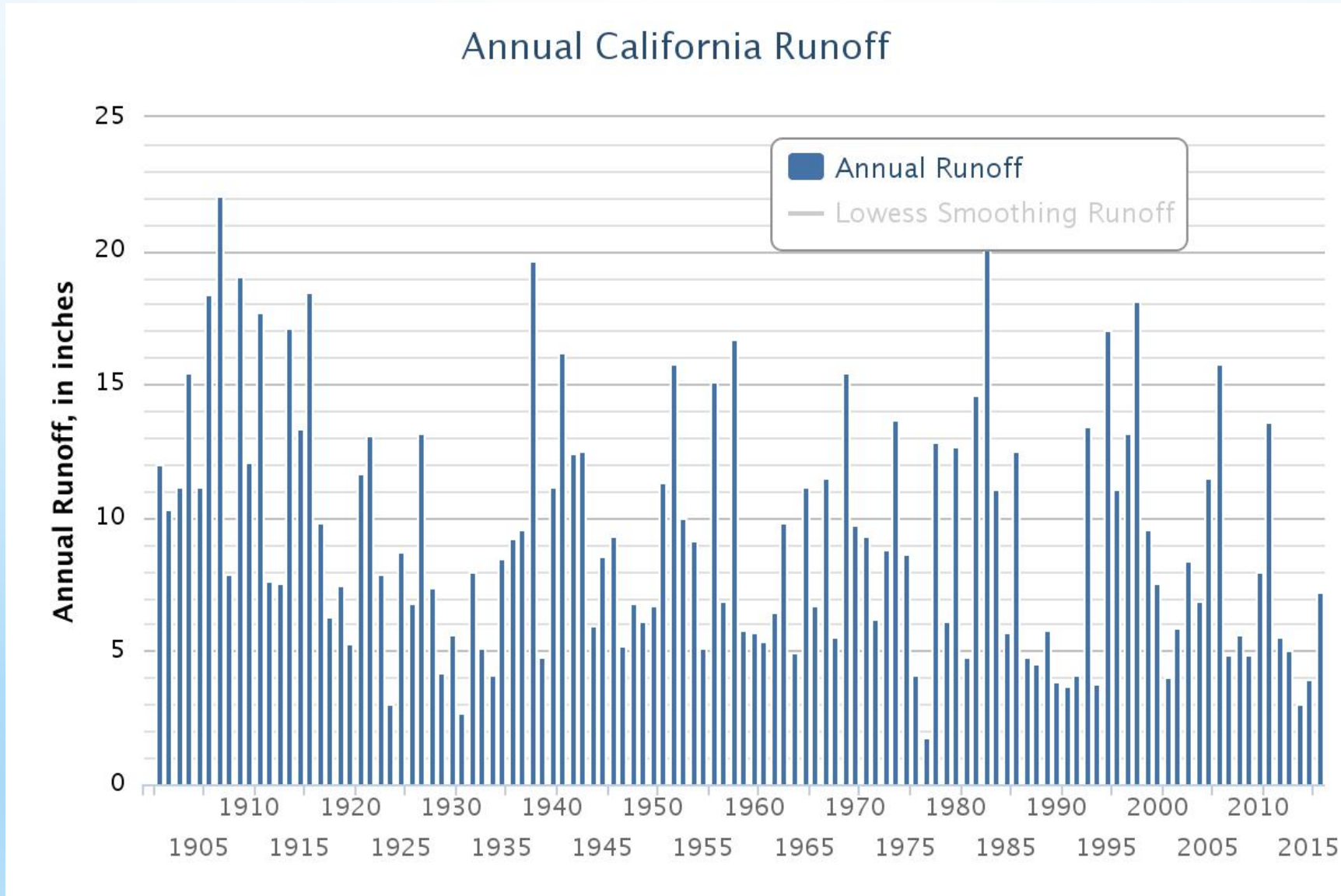
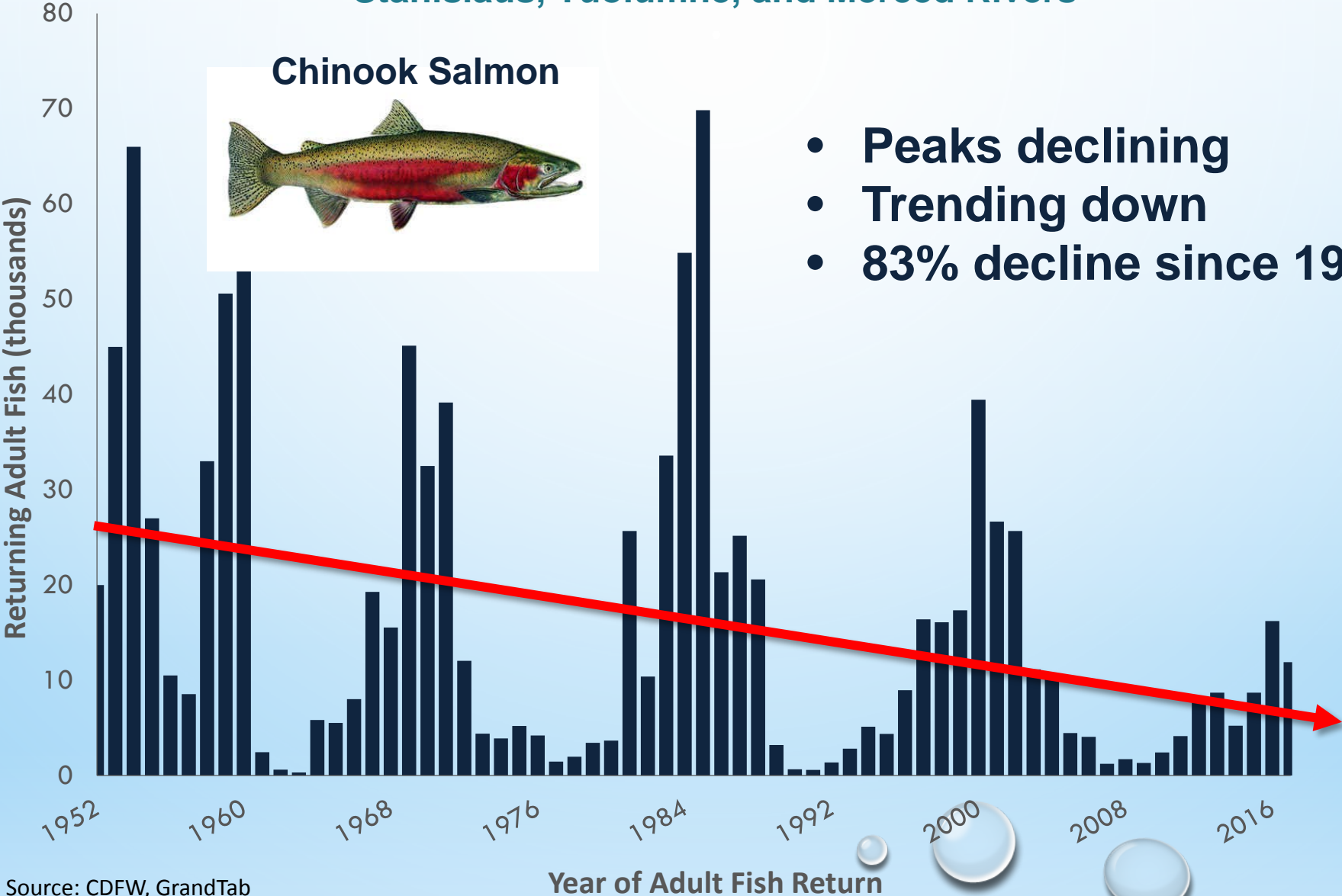


Image credit: U.S. Geological Survey

Why Flows Matter

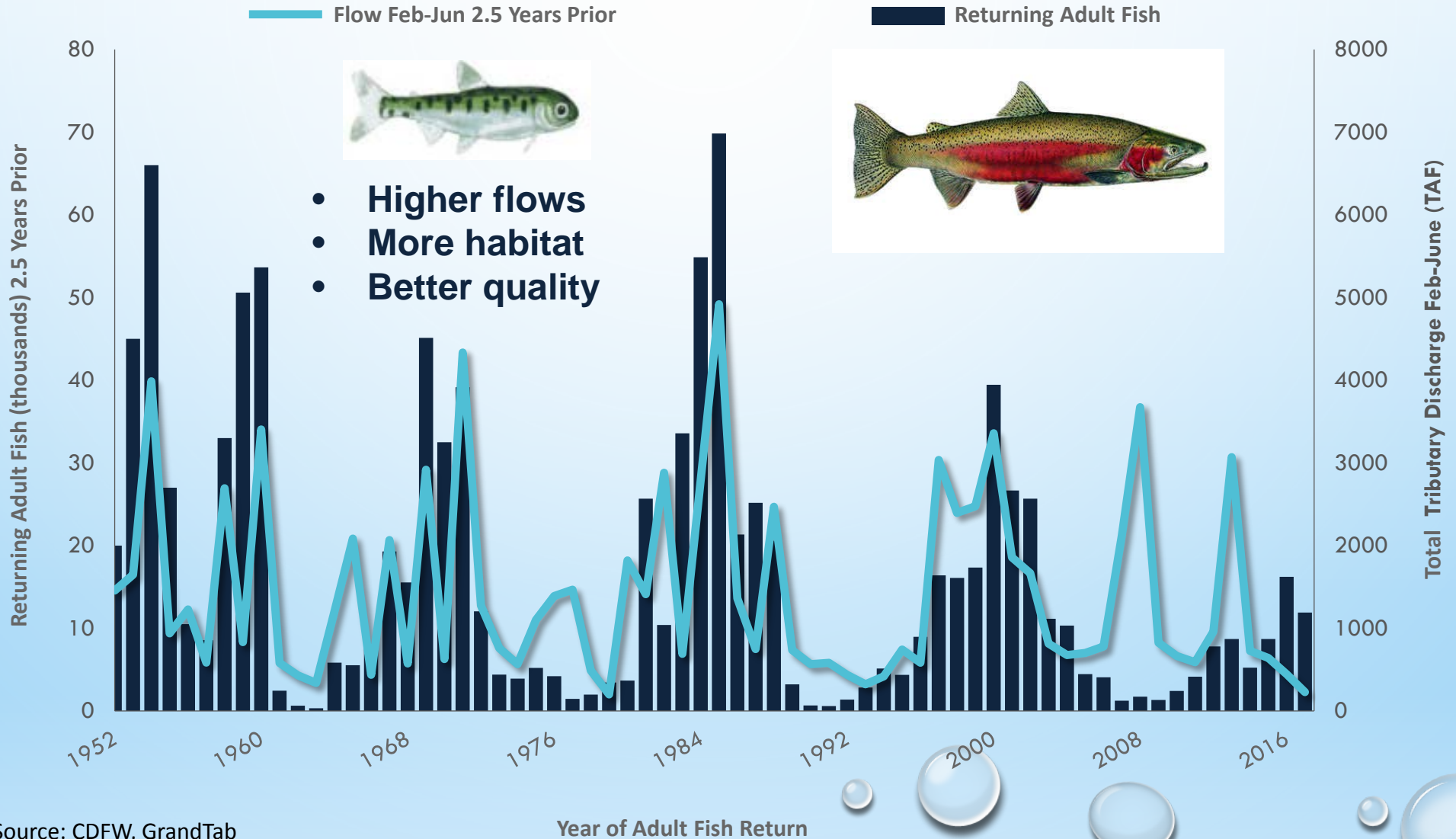
Stanislaus, Tuolumne, and Merced Rivers



Source: CDFW, GrandTab

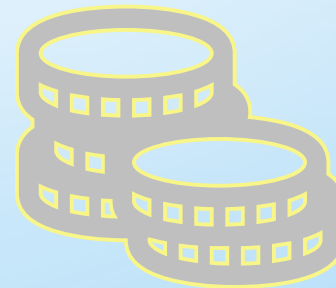
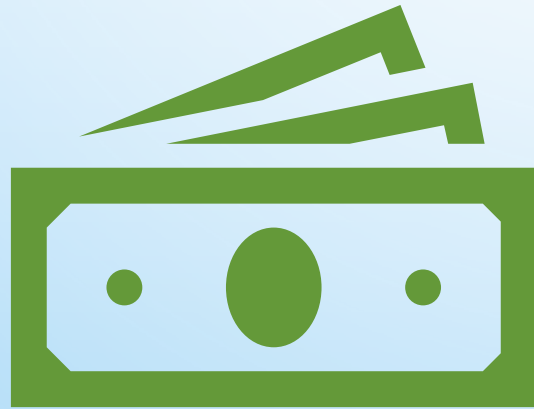
Why Flows Matter

Flows Experienced by Juveniles & Adult Fish 2.5 Years Later



Source: CDFW, GrandTab

**PROPOSAL 31.1:
INCLUDE WATER PORTFOLIO PRIORITIES
IN THE DISCUSSION OF
A POTENTIAL CLIMATE RESILIENCE GENERAL OBLIGATION BOND**



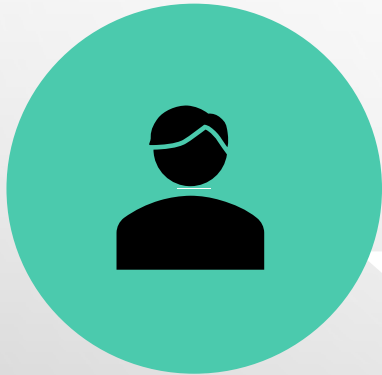
Grant
Revert Revenue Bonds
Appropriate
G. O. BONDS
Encumber

✓ What are Bonds?

✓ What happens after a bond act passes?

WHAT BONDS ARE BEING PROPOSED*

(*VERY MUCH SUBJECT TO CHANGE AT THIS POINT)



GOVERNOR
\$4.75 Billion

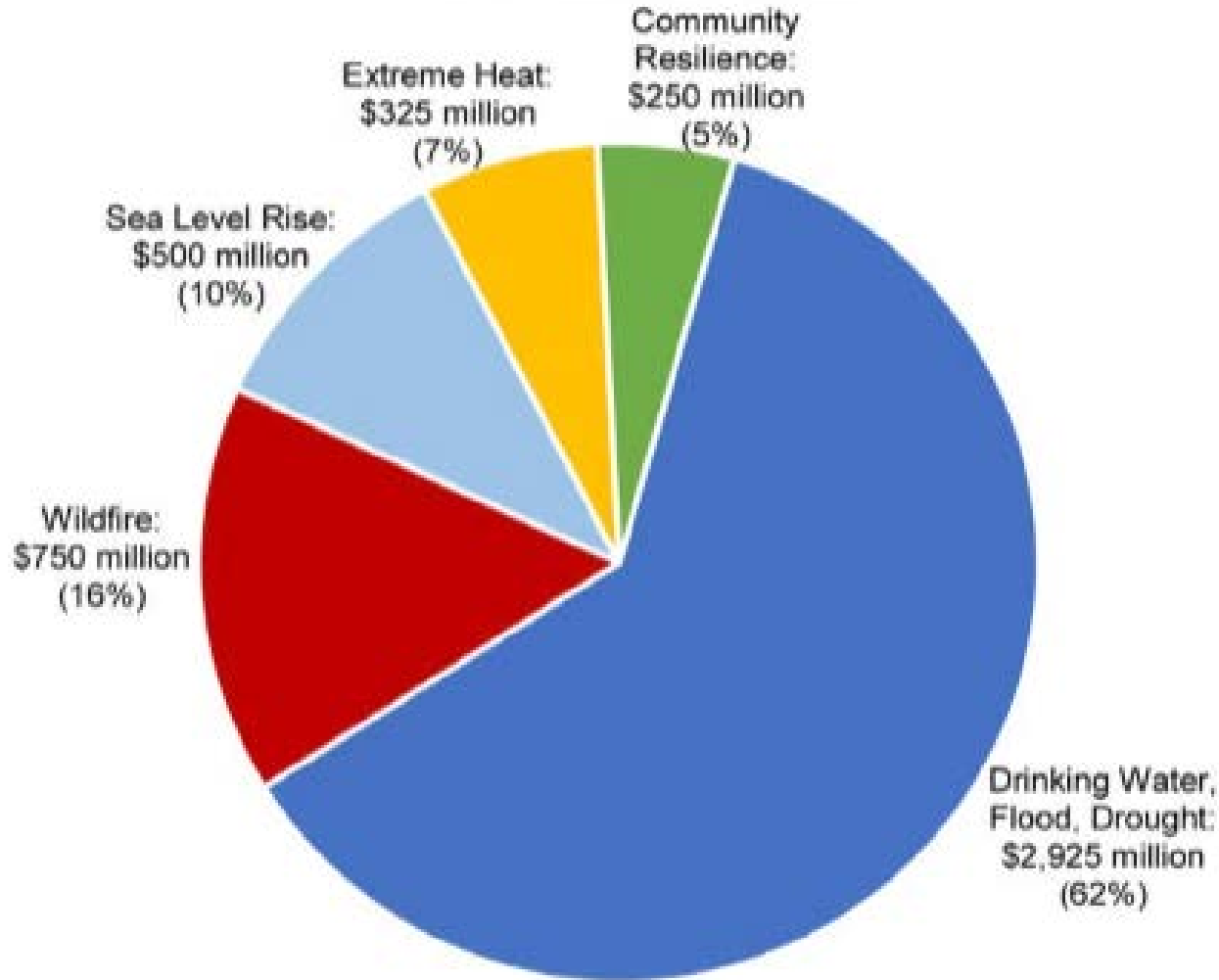


ASSEMBLY
\$3.92 Billion



SENATE
\$5.51 Billion

Climate Resilience Bond



Climate Resilience Bond (Dollars in Millions)

Investment Category	Department	Program	Amount
Drinking Water, Flood, Drought	Department of Water Resources / State Water Resources Control Board	Regional and Inter-regional Water Resilience	\$1,000
	Department of Water Resources	Sustainable Groundwater Management	\$395
	State Water Resources Control Board	Safe Drinking Water	\$360
	Department of Water Resources	Flood - Urban/USACE Projects	\$340
		Flood - Systemwide Multi-benefit	\$270
	Natural Resources Agency	Salton Sea	\$220
	California Department of Food and Agriculture	Environmental Farming Incentive Program	\$200
	Department of Fish and Wildlife	Enhanced Stream Flows and Fish Passage	\$140
		Subtotal	\$2,925
Wildfire	Natural Resources Agency, CAL FIRE, and Office of Emergency Services	Hardening of Critical Community Infrastructure	\$500
	CAL FIRE	Forest Health	\$250
		Subtotal	\$750
Sea Level Rise	Ocean Protection Council	Coastal Wetland Restoration	\$320
		Nature-Based Solutions to Build Resilience	\$130
		Demonstration Projects to Protect Critical Infrastructure	\$50
		Subtotal	\$500
Extreme Heat	Natural Resources Agency	Urban Greening and Forestry	\$200
	Strategic Growth Council	Cool Surface Materials	\$125
		Subtotal	\$325
Community Resilience	Strategic Growth Council	Community Resilience Planning	\$25
		Community Resiliency Centers	\$225
		Subtotal	\$250
		Total	\$4,750

ASSEMBLY BILL 352 (EDUARDO GARCIA) (\$3.92 BILLION)

WILDFIRE PREVENTION, SAFE DRINKING WATER, DROUGHT PREPARATION, AND FLOOD PROTECTION BOND ACT OF 2020

- \$1,250 MILLION FOR WILDFIRE, FLOOD, DROUGHT, OR OTHER NATURAL DISASTER PREVENTION/CLIMATE CHANGE IMPACTS
- \$ 925 MILLION FOR PROVIDING SAFE DRINKING WATER AND PROTECTING WATER SUPPLY AND WATER QUALITY FROM CLIMATE RISKS
- \$ 725 MILLION FOR THE CREATION AND EXPANSION OF SAFE NEIGHBORHOOD PARKS IN PARK-POOR NEIGHBORHOODS
- \$ 475 MILLION FOR PROTECTING FISH AND WILDLIFE FROM CLIMATE RISKS
- \$ 100 MILLION FOR PROTECTING AGRICULTURAL LAND FROM CLIMATE RISKS
- \$ 215 MILLION FOR PROTECTING COASTAL LANDS, OCEANS, BAYS, WATERS, NATURAL RESOURCES, AND WILDLIFE FROM CLIMATE RISKS
- \$ 230 MILLION FOR CLIMATE RESILIENCE, WORKFORCE DEVELOPMENT, AND EDUCATION

SENATE BILL 45 (BEN ALLEN) (\$5.51 BILLION)

*WILDFIRE PREVENTION, SAFE DRINKING WATER, DROUGHT PREPARATION, AND FLOOD PROTECTION
BOND ACT OF 2020*

\$2,200 MILLION FOR WILDFIRE PREVENTION, DROUGHT, OR OTHER NATURAL DISASTER/CLIMATE
CHANGE IMPACTS

\$1,470 MILLION FOR PROVIDING SAFE DRINKING WATER AND PROTECTING WATER SUPPLY AND WATER
QUALITY FROM CLIMATE RISKS

\$ 620 MILLION FOR PROTECTING FISH AND WILDLIFE FROM CLIMATE RISKS

\$ 190 MILLION FOR PROTECTING AGRICULTURAL LAND FROM CLIMATE RISKS

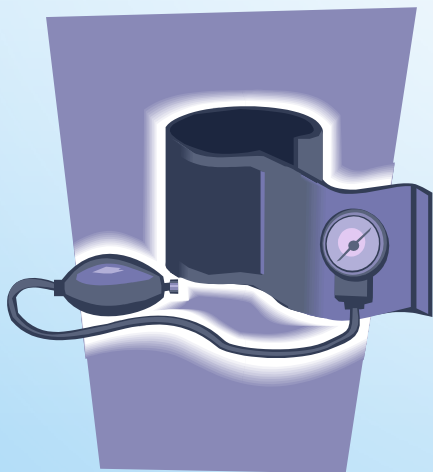
\$ 970 MILLION FOR PROTECTING COASTAL LANDS, OCEANS, BAYS, WATERS, NATURAL RESOURCES, AND
WILDLIFE FROM CLIMATE RISKS

\$ 60 MILLION FOR CLIMATE RESILIENCE, WORKFORCE DEVELOPMENT, AND EDUCATION

Some Challenges for Bonds...

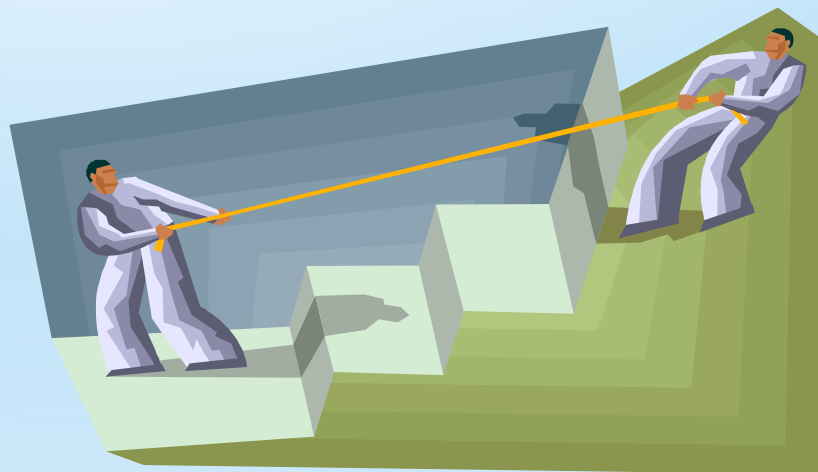


Unspent
Bond Funds



Competing
Regional Priorities

General Fund Pressure



A FEW LINKS FOR ADDITIONAL INFORMATION

- WATER RESILIENCE PORTFOLIO: [HTTP://WATERRESILIENCE.CA.GOV/](http://waterresilience.ca.gov/)
- SAFE DRINKING WATER: [HTTPS://WWW.WATERBOARDS.CA.GOV/DRINKING_WATER/PROGRAMS/](https://www.waterboards.ca.gov/drinking_water/programs/)
- SUSTAINABLE GROUNDWATER MANAGEMENT ACT:
[HTTPS://WATER.CA.GOV/PROGRAMS/GROUNDWATER-MANAGEMENT](https://water.ca.gov/programs/groundwater-management) &
[HTTPS://WWW.WATERBOARDS.CA.GOV/WATER_ISSUES/PROGRAMS/GROUNDWATER/](https://www.waterboards.ca.gov/water_issues/programs/groundwater/)
- BAY-DELTA WATER QUALITY CONTROL PLAN:
[HTTPS://WWW.WATERBOARDS.CA.GOV/WATERRIGHTS/WATER_ISSUES/PROGRAMS/BAY_DELTA/](https://www.waterboards.ca.gov/waterrights/water_issues/programs/bay_delta/)
- GOV'S BOND: [HTTP://EBUDGET.CA.GOV/2020-21/PDF/BUDGETSUMMARY/CLIMATERESILIENCE.PDF](http://ebudget.ca.gov/2020-21/pdf/budgetsummary/climateresilience.pdf)
- ASSEMBLY AND SENATE BOND BILLS: [HTTP://LEGINFO.LEGISLATURE.CA.GOV/](http://leginfo.legislature.ca.gov/)

