

CALIFORNIA DEPARTMENT OF WATER RESOURCES

SWP Drought Response

*Planning for Water Year 2023
California Water Commission
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Presentation Topics

- Climate and Forecasting Update
- WY 2022 Drought Actions Summary
- WY 2023 Response Framework

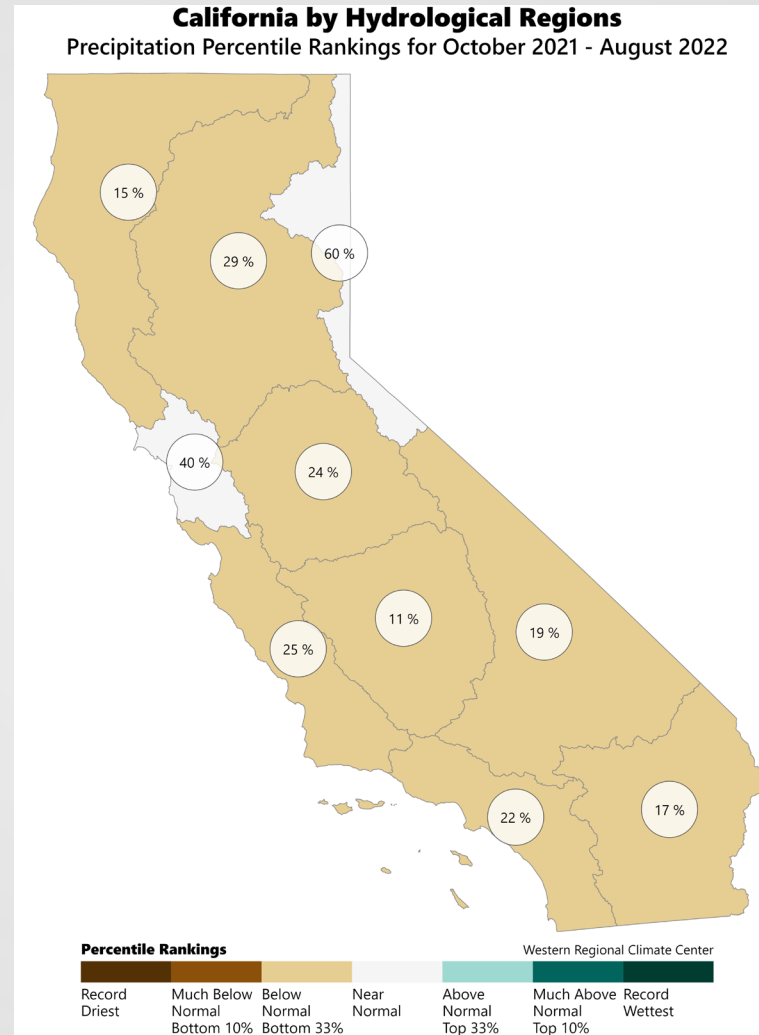
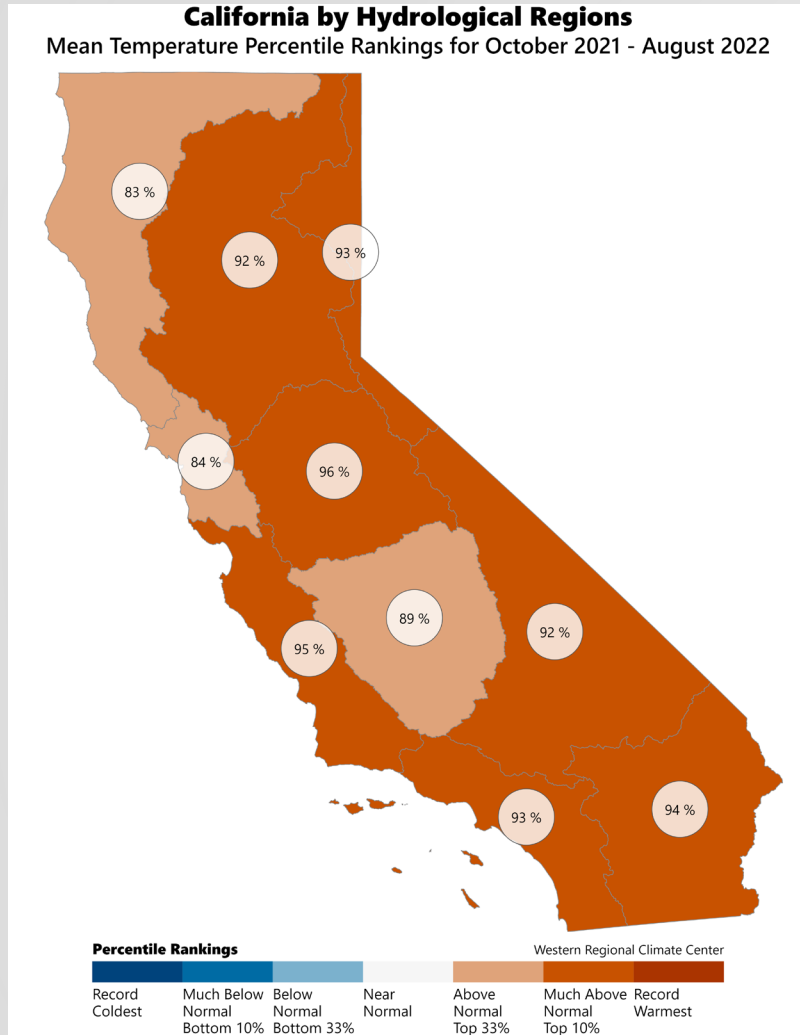


WY 2022 Conditions Recap

- Fall and winter WY 2022 included extreme wet and extreme dry months
- Storage is slightly better than last year, but still well below average
- Recently observed extremes require conservative planning and continued aggressive multiagency action



WY 2022 Conditions

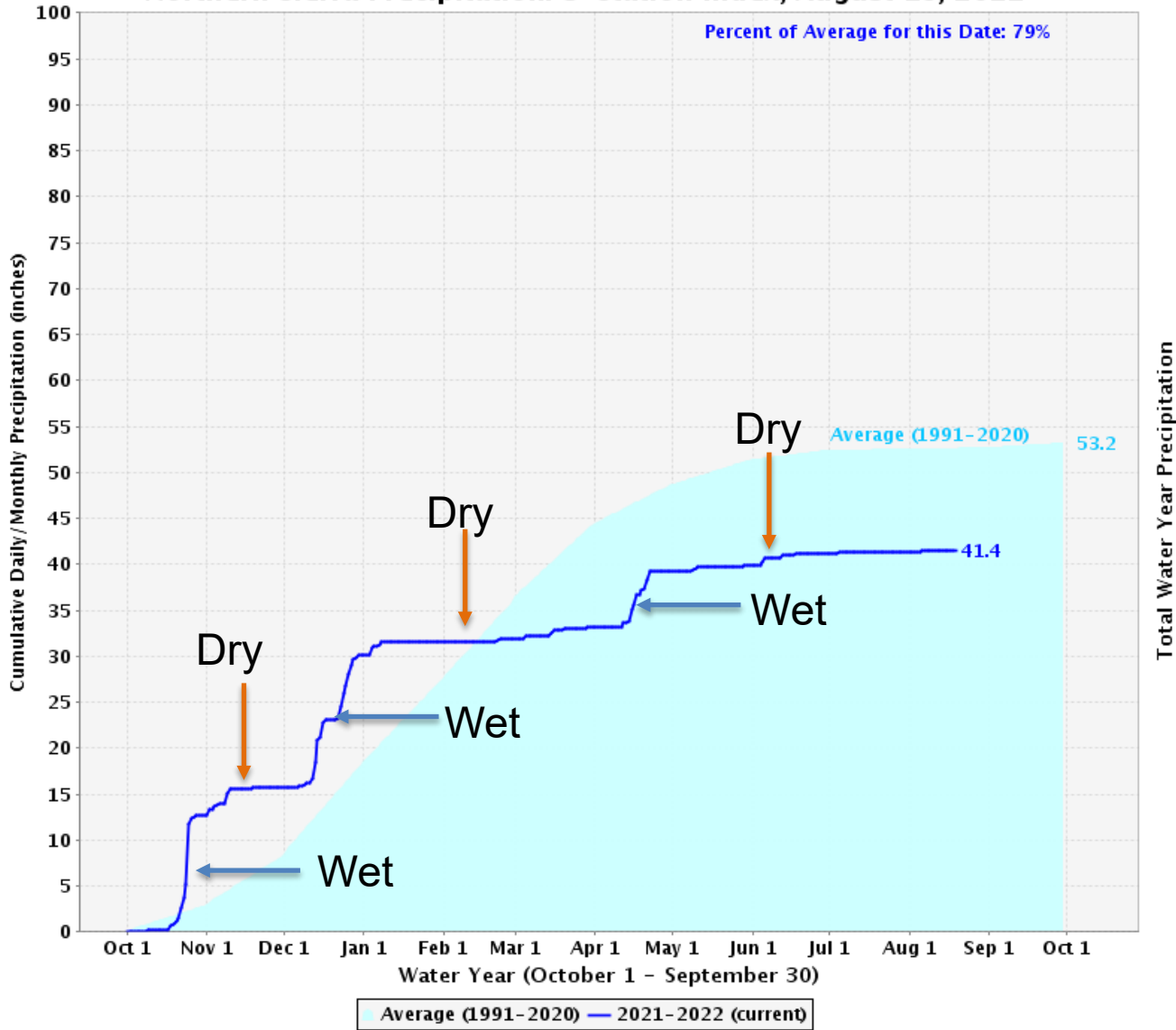


Mean temperatures were very warm again in 2022, but cooler than water year 2021

Precipitation overall was very dry but wetter than water year 2021



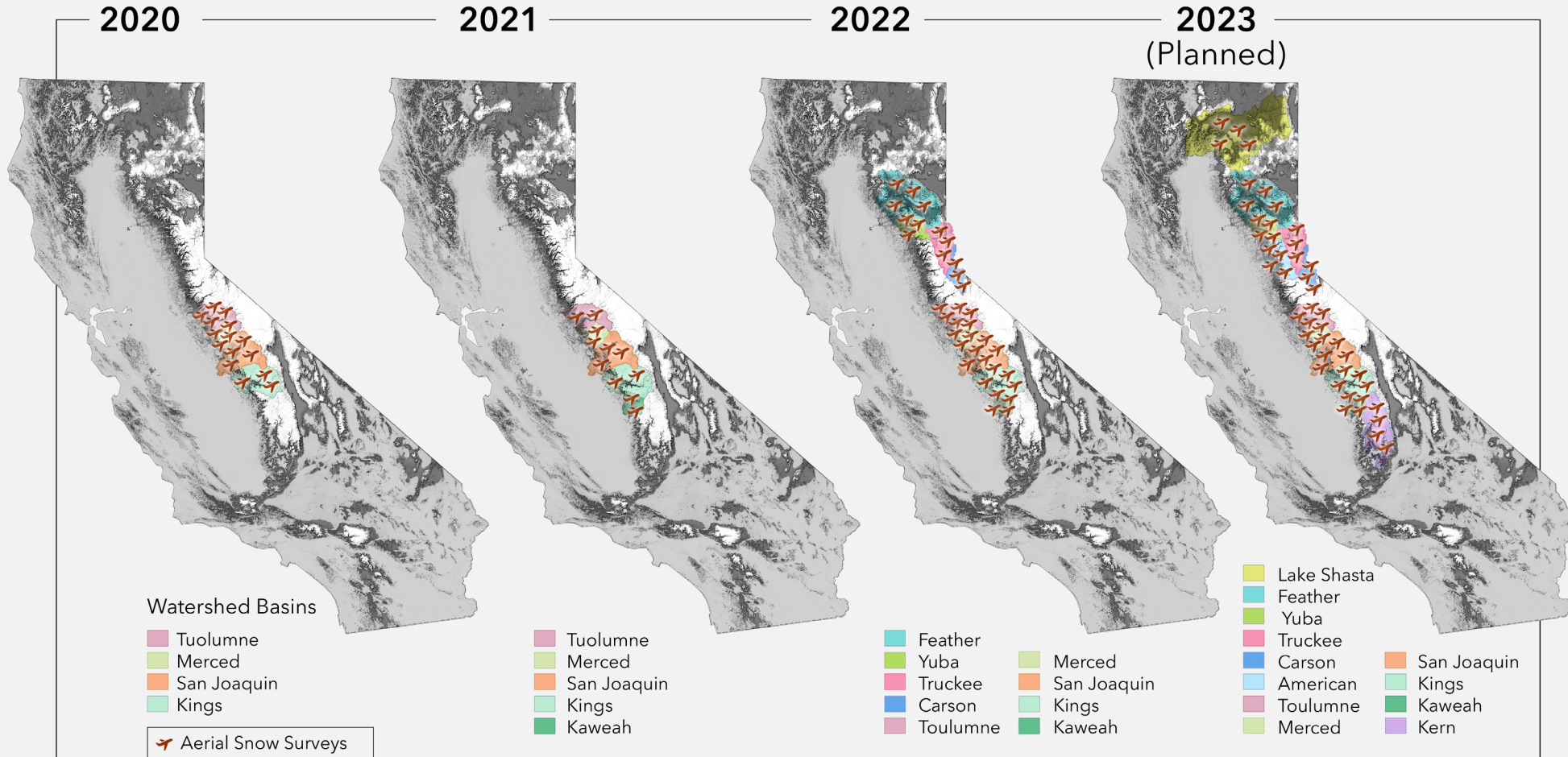
Northern Sierra Precipitation: 8-Station Index, August 19, 2022



Stairstep pattern in WY 2022 exemplifies new extremes and variability associated with climate change



EXPANSION OF AERIAL SNOW SURVEYS



Since 2020, DWR has been expanding both the number of watersheds surveyed and the number of flights per watershed.

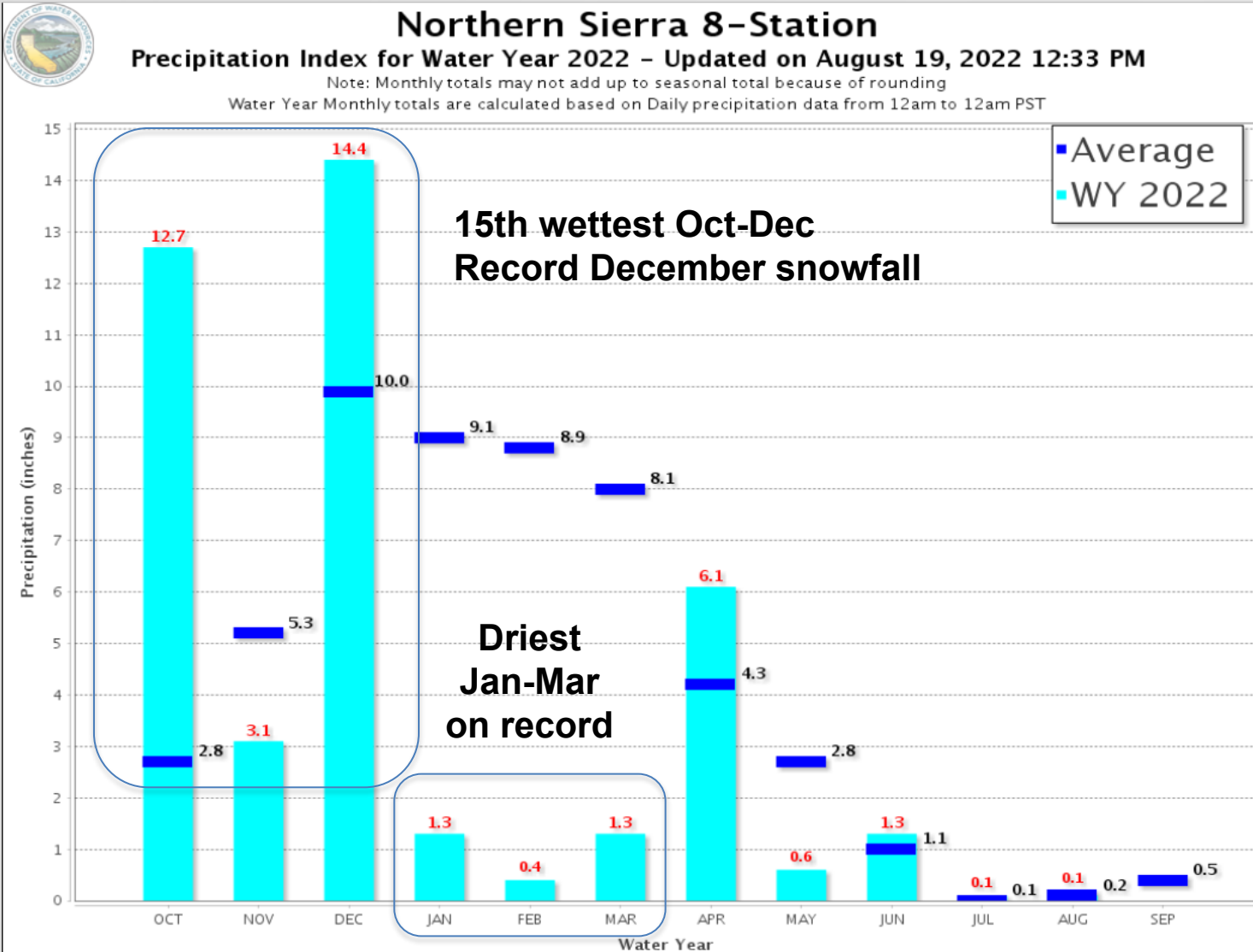
2023 will feature a further expansion of the program.



WY 2022 Drought Action Summary



WY 2022 Joint SWP Drought Actions



- December 2021:
 - Filed TUCP for February – March
- January 2022:
 - Notched West False River Barrier
 - Withdrew TUCP
- March 2022:
 - Driest January to March period on record
 - Filed TUCP for April through June
- April 2022:
 - West False River Barrier notch filled
 - Developed agreement for extremely limited Shasta releases



WY 2022 Re-Cap: Additional Drought Actions Taken

SWP

- Limited Feather River Settlement Contractors (FRSC) rice decomposition deliveries to preserve storage
- Reduced SWP Allocation = 5% + public health and safety
- Reduced FRSC irrigation deliveries by 50%



End of WY 2021 and WY 2022 Storage Conditions

Reservoir	End of WY 2021 Storage (% average)	Projected End of WY 2022 Storage
Central Valley Project		
<i>Trinity</i>	710 TAF (43%)	501 TAF
<i>Shasta</i>	1.07 MAF (39%)	1.48 MAF
<i>Folsom</i>	229 TAF (41%)	344 TAF
<i>New Melones</i>	842 TAF (63%)	638 TAF
State Water Project		
<i>Oroville</i>	0.79 MAF (36%)	1.25 MAF
TOTAL	3.6 MAF	4.2 MAF



Planning for 2023: Guiding Principles

- Support human right to water
- Protect imperiled fish and wildlife
- Balance and protect beneficial uses of water
- Honor water rights
- Promote fairness and equity in policy decisions
- Prioritize effective and efficient strategies
- Harness science and collaboration
- Continue to explore and implement creative, extraordinary ideas



Planning for a Dry 2023: Objectives

- Plan for a fourth consecutive dry year and continue preparing for extreme weather events
- Provide for minimum health and safety needs
- Maintain suitable water quality in the Delta, which is the source of municipal drinking water for many communities
- Protect species by meeting environmental needs
- Conserve storage to meet future critical needs
- Provide water supply from SWP
- Continued Agency and stakeholder communication



Planning for a Dry 2023: Potential Actions

- Rigorous multi-agency coordination
- If dry conditions persist through 2023 – actions the SWP may take:
 - SWP allocation based on critical domestic, sanitary, and fire suppression needs
 - Continue Coordination with Settlement Contractors
 - TUCPs and drought salinity barrier(s)
 - Use of SWP terminal reservoir emergency storage
 - Transfers and exchanges south of Delta, if possible
- Other actions outside SWP:
 - CVP actions
 - SWRCB Curtailment orders
 - Improve voluntary and/or mandatory conservation
 - Governor’s emergency orders and proclamations
- Worst case (dry year) offramps include:
 - Improving hydrologic conditions
- Continue forecast and modeling improvement efforts



Next Steps: Oct – Dec 2022

- Dry fall drought actions:
 - SWP
 - Continue release reductions at Oroville to conserve storage
 - Low Initial Allocation
 - Coordinate with FRSC on limited rice decomp deliveries
- Continue agency coordination



Additional Resources:

<https://drought.ca.gov>

**California Water Watch
DWRs CA Drought Monitor**

<https://cww.water.ca.gov/>

