



State Water Plan Update

IAFSM Conference

March 8, 2022

State Water Plan Task Force



IAFSM

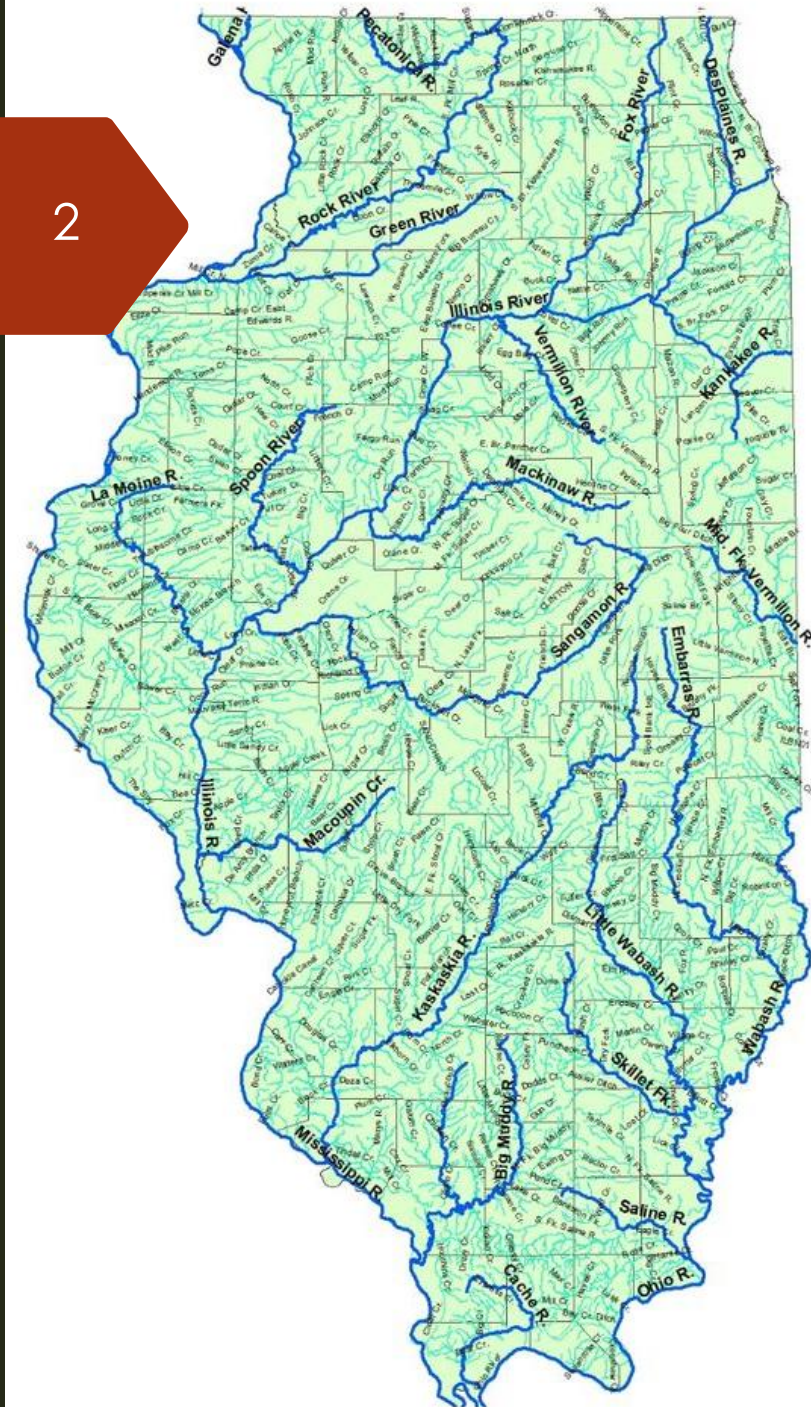
Illinois Association for
Floodplain and Stormwater Management



State Water Plan Update

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- State Water Plan History
- Updating Process
- Critical Topics
 - Water Sustainability
 - Flood Damage Mitigation
 - Climate Change
 - Integrated Management
- Schedule
- Where to Find out More?



- First Illinois Water Plan issued in 1967
- Task force appointed by Governor Thompson in 1980
- First task force meeting was May 6, 1980
- Focused on policy level individuals from various agencies
- Updated Illinois Water Plan submitted to the Governor January 31, 1984 --- “**...intended to provide policy and program guidance in water resource management.**”
- 17 Special Reports on Critical Issues were published from 1982-1991
- A State Water Plan Update was published in 1994

History of the Plan



Plan Mission & Goals

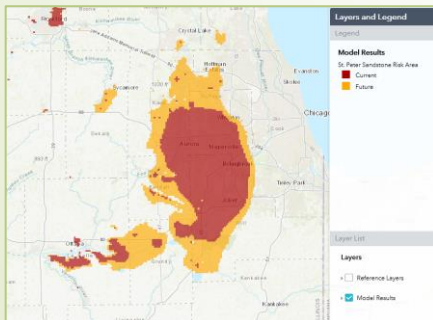
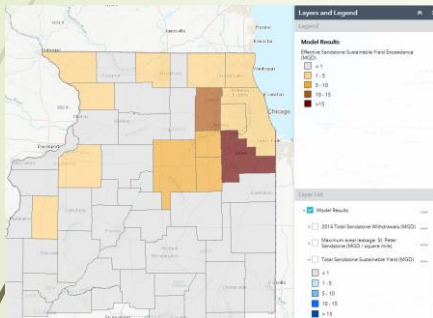
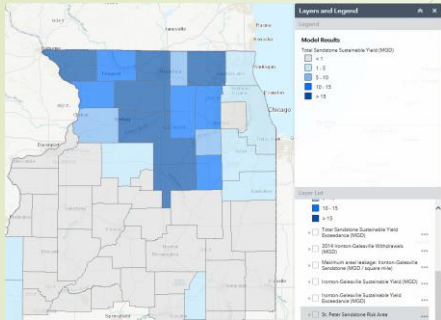
Mission

- “For state agencies to develop a concise plan for addressing the water issues facing the state in an efficient and unified front.”

Goals

- To develop a plan that provides policy and program guidance in water resources management and ensures that the water resources of the state are available to all in Illinois regardless of race, income, housing status, or geography, and that remediation efforts enhance and protect water quality and supply for all Illinoisans and wildlife.

A modern, evolving, accessible water plan



GIS Web
Based Data

Updateable
(Dynamic)

Accessible
to the Public

“Paper”
Report per
decade

Source: ISWS Web maps

Updating Process

Organize

- Determine new critical issues and/or updates to existing
- Assign lead and supporting agencies
- Establish consistent practices

Research & Outreach

- Create committees for the critical issues
- Identify issues, impacts, on-going activities, recommendations and benefits

Publish

- Combine findings and publish report
- Determine next steps

Smaller outreach efforts through associations is ongoing

Reviewing the public comments

Developing recommendations for identified issues for each topic

Preparing DRAFT report

Final public outreach

We're Here

Current efforts

Critical Issues

#	Issue	Lead	Supporting Agencies
1	Water Quality	IEPA	ISWS, ORC, IDPH, OMM
2	Climate Change	ISWS	OWR, ORC, IWRC
3	Integrated Water Management	OWR	IEPA, ISWS
4	Long Term Funding	IEPA	OWR, IDPH
5	Water Sustainability	OWR	ISWS, ORC
6	Lake Michigan	OWR	IEPA
7	Flood Damage Mitigation	OWR	IEMA, ISWS
8	Aquatic & Riparian Habitat	ORC	ISWS, OWR, IWRC
9	Illinois Water Use Laws & Regulations	OWR	IWRC
10	Navigation Needs & Improvements	IDOT	OWR
11	Erosion & Sedimentation	IDOA	ISWS
12	Stream Data Management	ISWS	IDOT, IWRC
13	Recreation	ORC	IDOT, OWR

Water Sustainability

Ensure adequate quantity of water for all water users

➤ Water Use Data & Demand

- Funding & consistent updates
- High-capacity wells

➤ Water Supply Management Practices

- Clarify state roles
- Local emergency plans

I S S U E S

➤ Water Supply

- Update source yields regularly
- Climate impacts
- Sustainability

➤ Regional Water Supply Planning Program

- Standardize reporting

Lead: Wes Cattoor, IDNR-OWR, wes.cattoor@illinois.gov

Water Sustainability

Recommendations

Funding

- Prioritize to vulnerable and low-income communities
- Consider opportunities to expand revolving loan fund

Stakeholder Involvement & Outreach

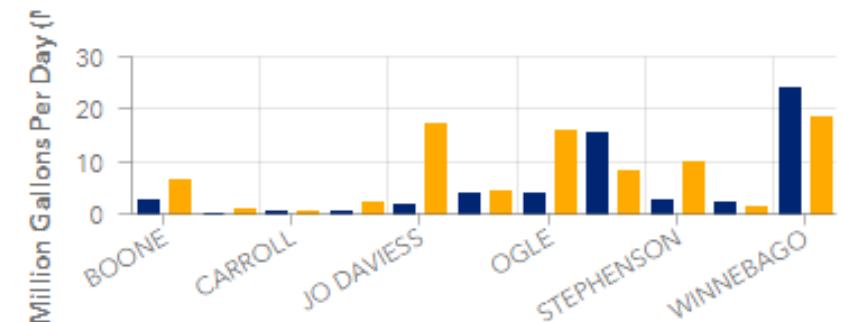
- Establish regional committees throughout the State
- Develop regional emergency plans
- Improve outreach of state agency roles

Planning & Studies

- Regular statewide supply and demand updates
- Plan for climate change including evaporation study update
- Improve high capacity well water use reporting
- Update Drought Preparedness Plan

Supply/Demand by Water Use Type

Municipal



● Demand ● Supply

Last update: 3 minutes ago

Municipal

Industrial

Agricultural

Thermoelectric

Example Report Recommendations



Issue	Recommendation	Lead Agency	Funding	Action
1. Social Equity	Prioritize services to vulnerable and low-income communities.	IDNR	Annual OWR GRF	Program activity
2. Sustainable Water Supply	Update the statewide water demand forecasts with annual water use data and each decade with population forecasts. Determine sustainable water yield for all water supply sources and update every five years. Annually evaluate shortages. This data will be provided on a GIS application, available to the public, and easily accessible.	IDNR & ISWS	Annual OWR GRF	Program activity
3. Local Collaboration	Establish region water supply committees throughout state where this is sufficient interest. Ensure data are readily available to support regional water supply committees. Add structure to regional plans to identify and report on capital improvement project needs related to water sustainability.	Local Communities	Annual Grants for Committee Development	Program activity
4. Climate Change impacts on Evaporation Data	The new study on lake evaporate will include recent higher evaporation rates due to higher temperature and more extreme drought expected from climate change leading to a more accurate assessment of surface water availability	ISWS	Annual OWR GRF	Research / Study
5. Low Flow Water protection	Work with regional water supply planning committees to develop state and regional strategies for implementation during emergencies including stream low flow protection.	IDNR	Annual OWR GRF	Legislation
6. Outdated Drought Plans	Update the State of Illinois Drought Preparedness and Response Plan to ensure clear responsibilities, authorities/decision-making, and action plans are in place for when drought conditions come again, which they will.	IDNR	OWR Staff time	No
7. Improve Data Collection	Improve the accuracy of high capacity well water use reporting by adding metering requirements to Water Use Act of 1983.	ISWS / DOA	To be evaluated	Legislation
8. Public Education Improvements	Improve public outreach and education on state agencies' roles and responsibilities regarding water supply (IEPA, IDNR, IDPH).	TBD w/ IWM	Annual OWR GRF	Program activity
9. Funding Improvements	Work with state legislators to revise the state revolving loan eligibility requirements to be inclusive of administrative and planning activities.	IEPA	IEPA Staff time	Legislative

Flood Damage Mitigation

Reduce adverse impacts due to flooding

➤ Hazard Identification

- New and updated models/maps
- Climate change increased rainfall
- Internet access to maps/tools
- Risk and vulnerability

I S S U E S

➤ Mitigation

- Updated infrastructure
 - Structural and Natural
- Watershed planning
- Stormwater management upgrades

Lead: Terra McParland, IDNR-OWR, Terra.McParland@illinois.gov

Flood Damage Mitigation



Hazard Identification

- New Climate Variability report
- Statewide hydraulic model database
- Conduct preliminary 2-D statewide models
- Create dynamic inundation maps
- Continue conducting structural damage assessments
- Develop criteria for ranking disadvantaged communities
- Pilot urban flood warning system

Mitigation

- Statewide flood protection infrastructure database
- Assist disadvantaged communities
 - Assess existing infrastructure and needs
 - Develop alternatives study and design
 - Assist with construction of improvements
- Develop funding and resources search tool
- Promote green and natural solutions
- Promote watershed-level planning
- Assist in stormwater utility development

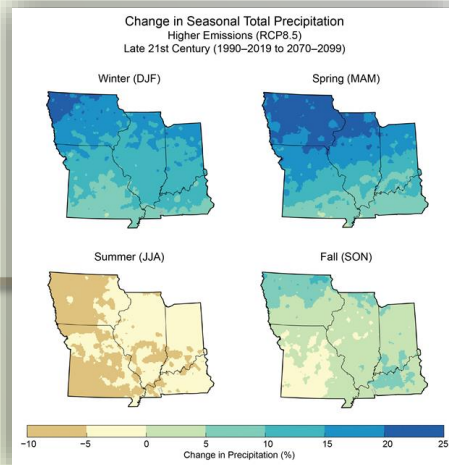
Recommendations

Climate Change

Affects the sources and demand for water in Illinois

➤ Need improved predictions

- Flash drought trends
- Precipitation seasonality
- Location and Land Use Changes



I S S U E S

➤ Threats

- Agricultural impacts
- Urban flooding
- Infrastructure interruptions



Lead: David Kristovich, ISWS, dkristo@illinois.edu

Climate Change

Data and Tools

- Increase climate monitoring sites
- Develop web-based climate tool kits
- Update climate models with local detail
- Evaluate concurrent climate change impacts
- Provide outreach and research for urban and agricultural impacts

Short Duration Changes

- Update Bulletin 75
- Update rainfall predictions using future extreme events

Seasonal Changes

- Research effects of non-stationarity on seasonal precipitation
- Develop outreach materials for flash droughts
- Research impacts of higher temperatures on ice melt

Recommendations



Integrated Management

Coordinating for unified, equitable & improved resolutions

➤ Collaboration

- Holistic and collaborative system approach
- Improve communications
- Data available to all
- Involvement of all Illinois people

I S S U E S

➤ Programs

- Programs that compliment each other by design
- Equitable resources
 - Floodplain uses
 - Water quality improvements
 - Regulations
 - Water policies

Lead: Loren Wobig, IDNR-OWR, Loren.Wobig@illinois.gov

Integrated Management

Collaboration

- Illinois Water Information Hub
 - Library of Resources
 - Storage of Data
 - Technology Innovations and Research
 - Multi-lingual resources development
 - Foster Inter-Agency collaboration
- Prioritize help for disadvantaged communities
- Expand the Illinois Mitigation Advisory Group

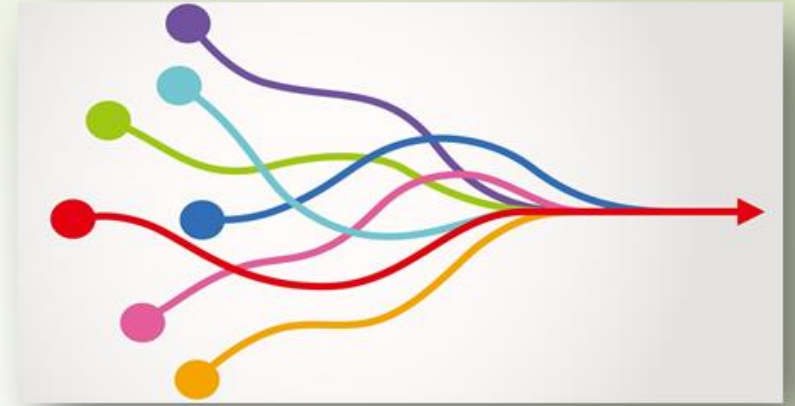
Task Force Directives & Funding

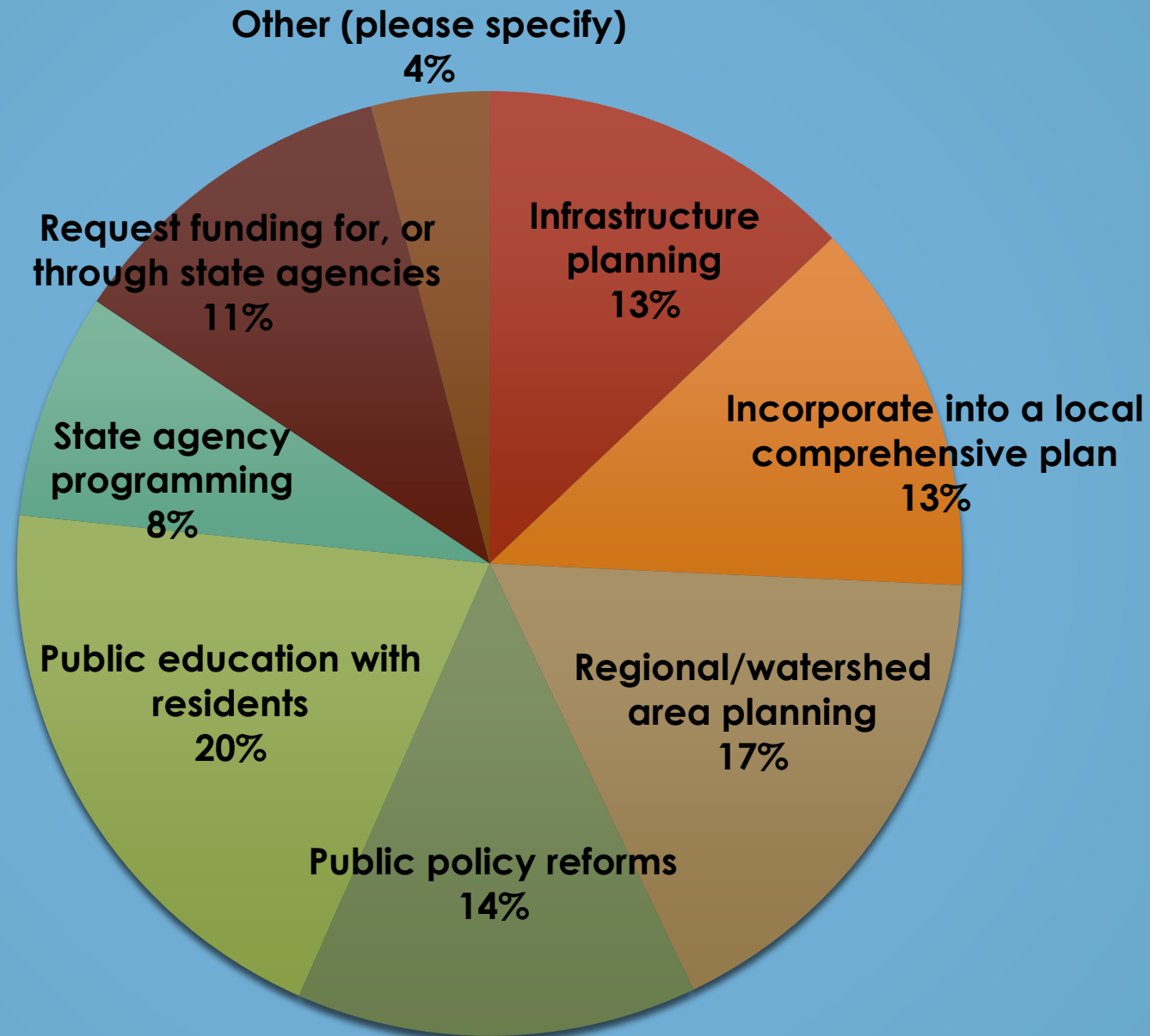
- Fund Task Force to implement of State Water Plan recommendations
- Develop consistent program funding criteria across all state agencies.
- Work with any Public-Private Partnerships

Outreach

- Re-establish local assistance program
- Educate professionals and the public

Recommendations





How do you Plan to Use the State Water Plan?

Remaining Report Schedule

Final Report Phase

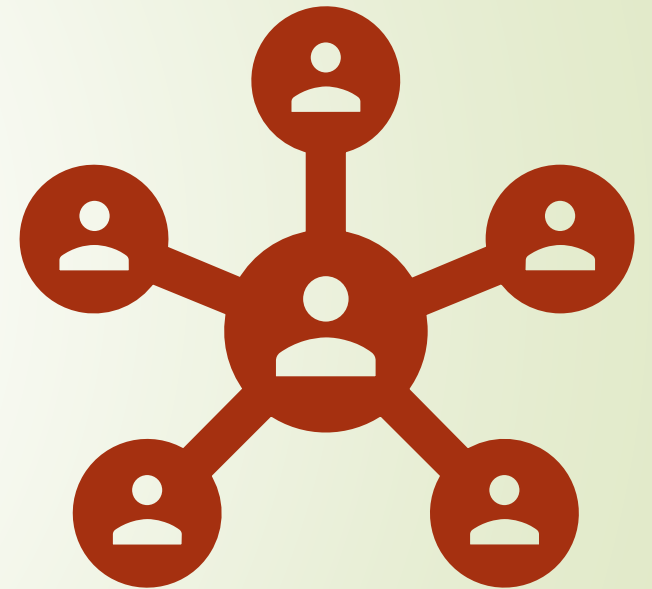
- March 15 – Receive each Committee's Section
- March 28 – SWPTF Meeting
- April 15 – Combined DRAFT Report Developed
- April TBD – SWPTF Meeting
- May TBD – Final Public Outreach
- June TBD – Close Public Comments
- Summer/Fall 2022 – Publish Report

**These dates are subject to change*



We need your help!

- Provide feedback in public outreach events
- Share this opportunity with others
- Support your state employees



- Stay informed of our current efforts and your future opportunities to participate at:

<https://www2.illinois.gov/dnr/WaterResources/Pages/StateWaterPlanTaskForce.aspx>

Or search “IDNR State Water Plan”

Keep up to date!

Thank you!

Loren Wobig, P.E. CFM

Director

IDNR – Office of Water Resources

Loren.Wobig@illinois.gov

Wes Cattoor, P.E. CFM

Section Chief, Engineering Studies

IDNR – Office of Water Resources

Wes.Cattoor@illinois.gov

Terra McParland, P.E.

Flood Surveillance Program Manager

IDNR – Office of Water Resources

Terra.McParland@illinois.gov



Issues addressed in the 1984 plan

Critical Issues

- Erosion and Sediment Control
- Underground Water Protection
- Flood Damage Mitigation
- Water Conservation
- Competition for Water
- Aquatic & Riparian Habitat Protection and Preservation
- Water-Based Recreation Opportunities
- Atmospheric Changes & Management
- Drought
- Water Law (Public Bodies of Water)

Cross-Cutting Topics

- Integrated Water Management
- Conflict Resolution
- Public Participation

Operating Issues

- Stream and Lake Use Management
- Stream Data Measurements
- Stream Indexing
- Natural Resource Information System
- Water Resources Permit Coordination
- Water Research and Education
- Reservoir and Lake Operations

Issues consider for the State Water Plan	Avg. Score	Considered in SWP #
Water Quality Protection	8.6	1
Long Term Funding	8.0	4
Water Supply Sustainability	7.7	5
Agency Communication	7.6	3
Atmospheric Changes and Management	7.4	2
Lake Michigan	7.3	6
Protection of Underground Water	7.1	1 or 5
Drought and Emergency Interruption of Supplies	6.9	5
Illinois Water Use Law	6.9	9
Aquatic and Riparian Habitat	6.7	8
Flood Damage Mitigation	6.6	7
Stream and Lake Use Management	6.6	5 or 7
Invasive Species	6.3	8
Integrated Water Management	6.3	3
Environmental Justice	6.3	Various
Stream Data Management	6.3	12
Erosion and Sediment Control	6.1	11
Natural Resource Information System	5.9	Various
Nutrient and HABs	5.7	11
Water Resource Permit Coordination	5.7	9
Water Resources Research and Education	5.7	Various
Water Conservation	5.6	5
Competition for Water	5.3	5
Public Participation	5.0	3
Reservoir and Lake Operation	5.0	5 & 7
Navigations Needs and Improvements	4.6	10
Stream Indexing	4.3	12
Water Based Recreation	4.1	13
Conflict Resolution	3.4	5

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Critical Issues

Overview of all States

#	State	Year	Age
1	Alaska	2018	<1
2	Connecticut	2018	<1
3	Florida	2018	<1
4	Mississippi	2018	<1
5	Alaska	2018	<1
6	Ohio	2018	<1
7	South Dakota	2018	<1
8	Tennessee	2018	<1
9	Wisconsin	2018	<1
10	New Jersey	2017	1
11	North Dakota	2017	1
12	Oregon	2017	1
13	Texas	2017	1
14	Vermont	2017	1
15	Michigan	2016	2
16	Colorado	2015	3
44	Missouri	2003	15
45	North Carolina	2001	17
46	Utah	2001	17
47	Nevada	1999	19
48	Illinois	1984	34
49	Louisiana	Not Listed	n/a
50	Maine	Not Listed	n/a

As of January 2019

