



Illinois State Water Plan and Its Next Steps

Illinois WW Ports Annual
Meeting

August 31, 2023



State Water Plan Update

- State Water Plan History
- State Water Plan Questions
 - What is the State Water Plan?
 - How is this Plan Different?
 - How Can I Use this Plan?
- Plan Development Process
- Report Overview and Highlights
- State Water Plan Future



- 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
- State Water Plan updates were published through 1994

History of the Plan

State Water Plan Task Force

- Illinois Department of Natural Resources (IDNR)
 - Office of Water Resources (OWR)
 - Office of Resource Conservation (ORC)
 - Office of Mines and Minerals (OMM)
- Illinois Environmental Protection Agency (IEPA)
- Illinois Pollution Control Board (IPCB)
- Illinois Department of Transportation (IDOT)
- Illinois Emergency Management Agency (IEMA)
- Illinois Department of Agriculture (IDOA)
- Illinois Department of Public Health (IDPH)
- Illinois Department of Commerce & Economic Opportunity (IDCEO)
- Illinois State Water Survey (ISWS)
- Illinois Water Resources Center (IWRC)

1980 Appointed Agencies equivalents

What is the State Water Plan?

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 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.

Audience

- IL General Assembly

Opportunity



Plan Development 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
- Solicit public and stakeholder input



Publish

- Combine findings and publish report
- Determine next steps
- Provide status updates as issues and recommendations are addressed

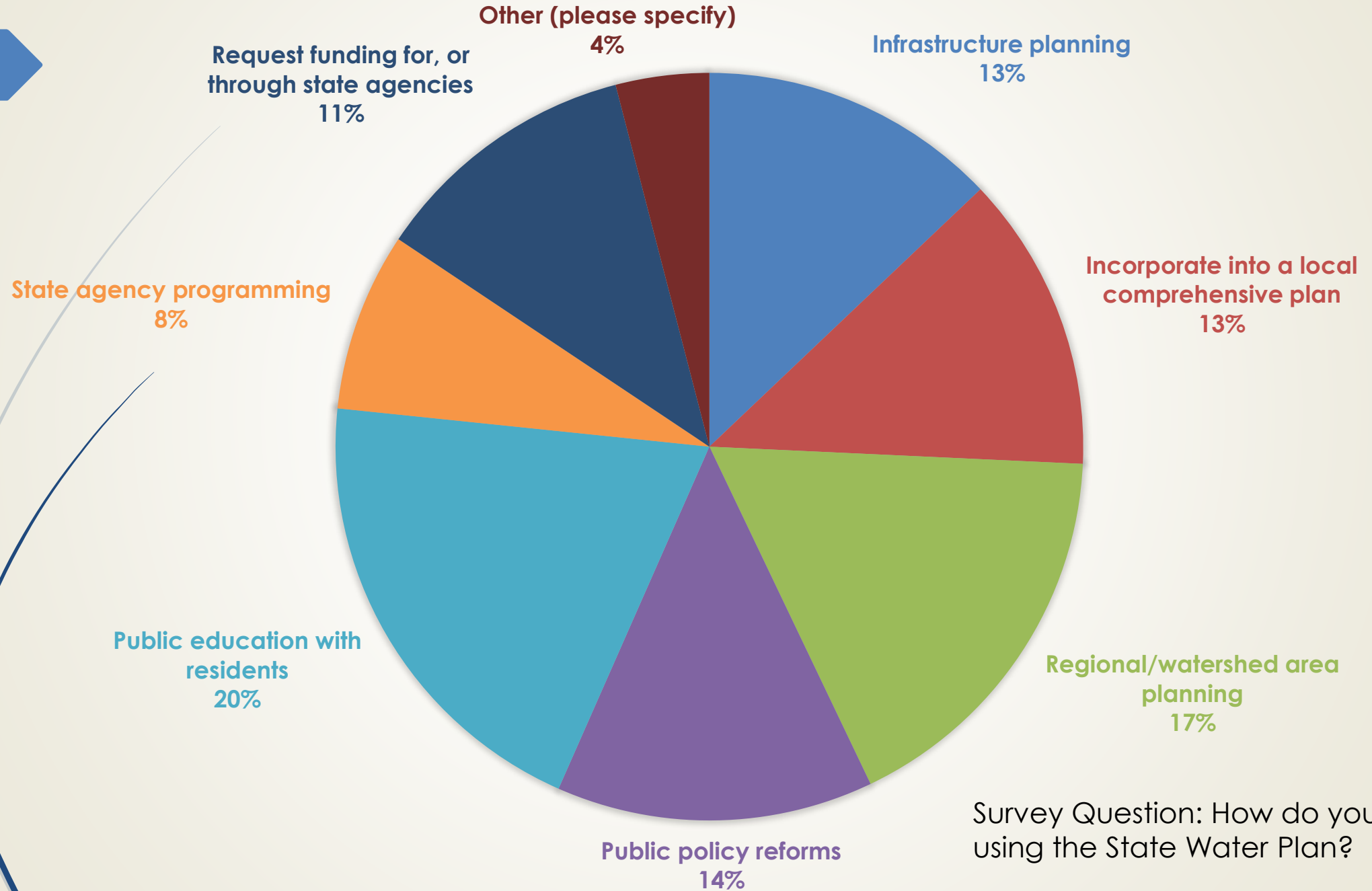


Implement

- Formal declaration of State Water Plan Task Force
- Implement the plan's recommendations
- Regular update to public



How can I use the State Water Plan?



Survey Question: How do you plan on using the State Water Plan?



Report Overview

Section 1 – Letter from Task Force Chair

Section 2 – Agency Support

Section 3 – Introduction

Section 4 – Social and Environmental Justice

Sections 5 to 17 – Thirteen Critical Topics

Section 18 – Recommendations & Cross Cutting Impacts

Section 19 – Conclusions

Appendices

13 Critical Issues

1. Water Quality

2. Climate Change

3. Integrated Water Management

4. Long Term Funding

5. Water Sustainability

6. Lake Michigan

7. Flood Damage Mitigation

8. Aquatic and Riparian Habitat

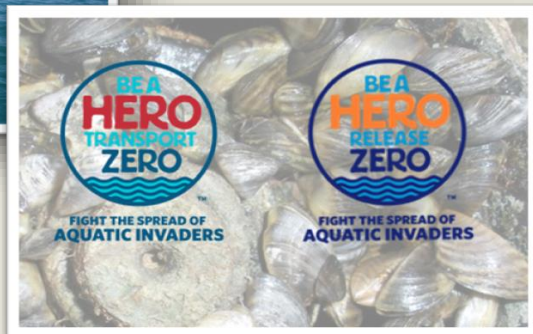
9. Water Use Laws and Regulations

10. Navigation

11. Erosion and Sedimentation

12. Data Management

13. Recreation





Example Report Recommendations

Issue	Recommendation	Lead Agency	Funding	Action
Provide Social Equity in services by giving service to those most in need first.	1. Prioritize services to vulnerable and low-income communities. Communities that meet such criteria will be assisted as top priority for services rendered by OWR and for capital improvement projects.	IDNR-OWR	Maintain Annual	Program
Ensure Illinois has a Sustainable Water Supply for all communities and users.	2. Update the statewide water demand forecasts with annual water use data and population forecasts. Determine sustainable water yield for all water supply sources and update every five years. Annually evaluate shortages. These data will be provided on a GIS application, available to the public, and easily accessible.	IDNR-OWR	Maintain Annual	Program
Solutions to water supply issues need to be derived from local collaboration and not directed from the state level.	3. Establish regional water supply committees throughout the state where there is sufficient local interest. Ensure consistent funding and data are readily available to support regional water supply committees. Add structure to regional plans to have local stakeholders identify and report on capital improvement project needs related to water sustainability.	IDNR-OWR	Increased Annual	Program
Need to identify climate change impacts on evaporation rates.	4. Document the effects of climate change on evaporation. The new study will focus on evaporation impacts due to higher temperatures and more extreme droughts expected from climate change. The resulting evaporation rates, along with other factors will lead to improved assessments of water availability.	ISWS	One-Time	Study
Rivers have no established minimum flow requirements which impacts downstream users and aquatic life.	5. Work with regional water supply planning committees to develop program policy and/or regional ordinances for implementation during emergencies including stream minimum flow protection.	IDNR-OWR	Maintain Annual	Policy
The State's Drought Plan is outdated.	6. Update the State of Illinois Drought Preparedness and Response Plan to ensure clear responsibilities, authorities/decision-making, and action plans are in place when drought conditions occur.	IDNR-OWR	One-Time	Study

- Water Quality**
- Support Nutrient Loss Reduction Strategy implementation
 - Support green infrastructure and water quality programs, and focus on underserved communities
 - Support voluntary nutrient reduction programs and focus on underserved communities
 - Support continued operation of USGS "Super Gages"
 - Harmful Algal Bloom Monitoring and Nutrient Monitoring in IL River Basin
 - PFAS and contaminant monitoring in fish
 - Expand groundwater monitoring network to include chronic and emerging
 - Protect and Restore Upper MS River
 - Outreach for proper well abandonment and water supply protection
 - Support underserved small public water system infrastructure improvement
 - Support regionalization efforts of underserved small public water systems
 - Support efforts of underserved small public water systems to meet long-term
 - Expand stream and groundwater monitoring to test for emerging WQI
 - Water Quality Outreach and Education through IWIC

- Climate Change**
- Expand climate monitoring sites in sensitive areas - suburban, urban
 - Develop web-based climate toolkits
 - Develop detailed local climate models
 - Research and develop online tools to illustrate concurrent climate
 - Research and provide climate impact information to urban and rural
 - Research and develop online tools to illustrate how agricultural
 - Update existing rainfall data
 - Model future climate change related rainfall data
 - Research effects of changing seasonal rainfall impacts on river
 - Evaluate impacts and provide information about flash drought
 - Research and outreach about rapid melt events

- Integrated Water**
- Establish the Integrated Water Information Center (IWIC)
 - Fund and support State Water Plan Task Force
 - Prioritize funding for water system improvements to underserved
 - Reestablish Local Assistance Program to guide underserved
 - Develop consistent funding criteria for all agencies
 - Expand IIMAG collaboration for increased efficiency and
 - Develop methodology for identifying and prioritizing

- Long Term**
- Dedicated funding for water resource management
 - Establish new Water Resources State Revolving Fund
 - Establish strategic fund for critical long-term issues
 - Mandate that water, wastewater and stormwater
 - Technical and financial support for underserved
 - Adopt technology to streamline state agency operations
 - Support Public-Private Partnerships
 - Enact stamps or license fees to generate targeted funds

- Water Distribution**
- Prioritize services to underserved communities
 - Determine sustainable water yield for all water supply sources and share online
 - Establish and support regional water supply committees
 - Study evaporation impacts from climate change
 - Develop minimum stream flow protection for during emergencies
 - Update IL Drought Preparedness and Response Plan
 - Improve water use accuracy with outreach and metering

- Lake Michigan**
- Outreach about Lake MI programs using the Local Assistance
 - Improve water allocation reporting
 - Update Rules regarding water loss and conservation
 - Expand Lake MI programs and prioritize services to underserved
 - Implement water allocation review fees to fund Lake MI Water
 - Establish workgroup for Lake MI water diversion
 - Strengthen coastal resiliency with regional management
 - Promote coastal tourism and recreation
 - Increase transportation of commercial goods and upgrade ports
 - Protect and restore coastal habitats
 - Evaluate feasibility of alternative energy in Lake MI and define acceptable

- Flood Damage Mitigation**
- Update rainfall data by modeling future/seasonal data changes
 - Develop a hydraulic model database
 - Generate 2-D hydraulic modeling for targeted areas in the state
 - Develop dynamic inundation mapping for targeted areas in the state
 - Perform structural damage assessments for targeted areas in the state
 - Identify 2 underserved communities per year that require flood planning assistance
 - Develop a pilot urban flood warning system
 - Develop GIS-based database of existing flood protective infrastructure and flood
 - Assess infrastructure and identify future needs for underserved communities
 - Develop project design for underserved community's flood mitigation plan as a
 - Provide funding for construction of the flood protection project for underserved
 - Encourage watershed level planning efforts
 - Adopt statewide building codes
 - Encourage natural and nature-based flood prevention measures

- Watershed Stewardship**
- Develop and implement watershed BMPs that benefit habitat
 - Enhance incentives for the implementation of watershed BMPs on private lands and provide outreach
 - Create multi-beneficial floodplains in underserved communities
 - Support Nutrient Loss Reduction Strategy
 - Enhance hydrologic and hydraulic connectivity
 - Enhance landscape connectivity
 - Establish and maintain stream and groundwater base flows criteria
 - Install more stream gauges to measure flow and water quality
 - Install more biological monitoring programs
 - Expand CTAP wetland monitoring
 - Monitor and control invasive species
 - Interagency monitoring data database
 - Develop flow standards for all public waters including oil and gas impacts
 - Develop biological indices in underrepresented habitats and biota
 - Develop policy guidelines to obtain adequate compensation for injured aquatic resources
 - Develop assessment approach and collect data to compensate for injured aquatic resources
 - Incorporate climate change flow standards into private water use regulations
 - Enact Aquatic Habitat Stamp on licenses to fund habitat protection
 - Establish authority to regulate isolated wetlands

- Water Use Laws & Regulations**
- Review Water Use Act for success and modify as needed
 - Propose legislation to regulate water reuse
 - Propose legislation for water diversions outside of IL
 - Authorize groundwater management districts
 - Resolve water use conflicts caused by prolonged drought
 - Meter high capacity well water use
 - Establish authority to regulate isolated wetlands

- Navigation**
- Maintain and upgrade IMTS infrastructure
 - Maintain and upgrade port infrastructure
 - Maintain and upgrade locks and dams
 - Upgrade bridge alignment and clearance issues
 - Adopt technology to streamline operations to save costs
 - Support USACE channel maintenance dredging programs
 - Utilize dredged material in infrastructure projects
 - Protect the IMTS environment
 - Navigation Outreach and Education using IWIC
 - Establish IDOT Marine Transportation Section

- Soil Conservation**
- Reinvigorate the Soil Erosion and Water Quality Advisory Committee (SEWQAC)
 - Expand soil and water conservation program coordination
 - Educate industry leaders, invest in STAR program
 - Update and expand the Illinois Urban Manual program
 - Target elementary and higher education with programs about soil erosion & sedimentation
 - Establish credentialing and apprenticeship program to train workers for this field
 - Statewide erosion/sedimentation survey and BMP recommendations
 - Expand staffing to assist local planning and implementation
 - Prioritize resources by targeting underserved areas and those with greatest need
 - Outreach and funding to install conservation practices in areas where valid complaint has been filed
 - Outreach efforts about success of in-field and edge-of-field practices
 - Watershed Councils to reduce nutrient levels
 - Secure federal funding for soil erosion and sedimentation reduction efforts
 - Bring of SESC inspection program to allow more participation
 - Expand into the CREP program
 - Expand and expand existing incentives to encourage participation in soil conservation practices
 - Include new technology and maintain accuracy
 - Support the NLRs programs
 - Improve monitoring of nutrient loss strategies
 - Improve management program
 - Outreach to assist in conservation efforts
 - Improve educational position

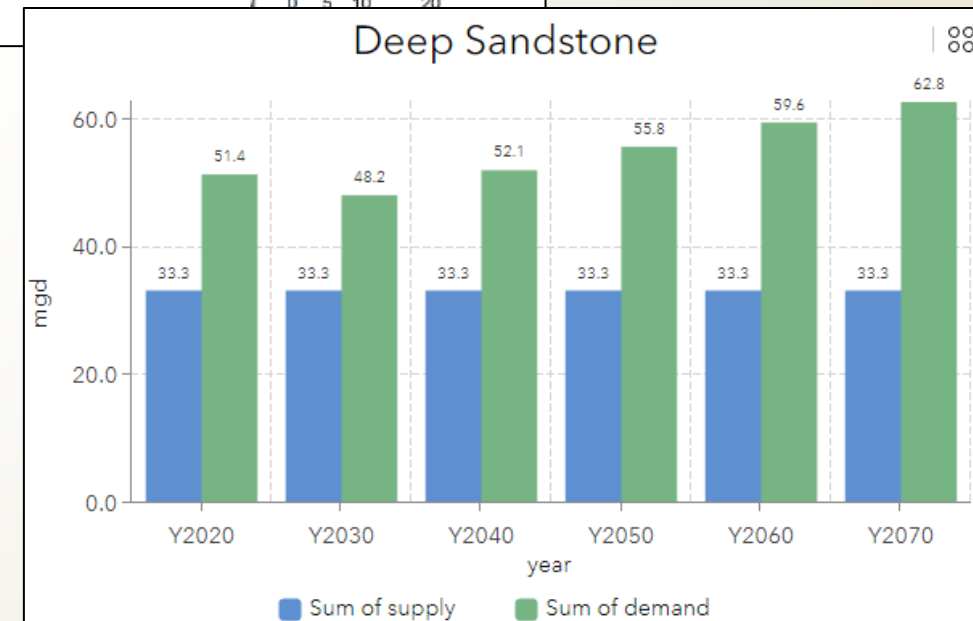
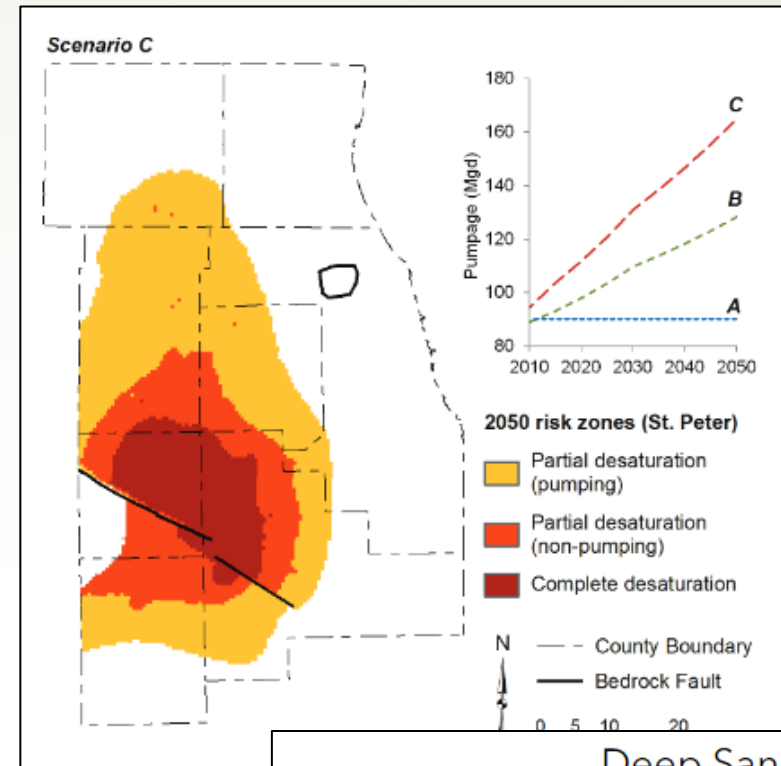
- Data Management**
- Ensure ability to meet current and future water data needs for everyone
 - Explore feasibility of Streamgaging Data Collaborative to secure funding for data
 - Use new data using IWIC

- Recreation**
- Use license fees to fund ANS management
 - Enter as part of the Brandon Road Interbasin Project
 - Improve access and focus on underserved locations
 - Create boat access to public waterbodies with underserved focus
 - Improve property with focus on underserved locations
 - Improve signage information
 - Improve regulations
 - Improve focus on low-head dam safety and navigation
 - Improve non-motorized boating on private property

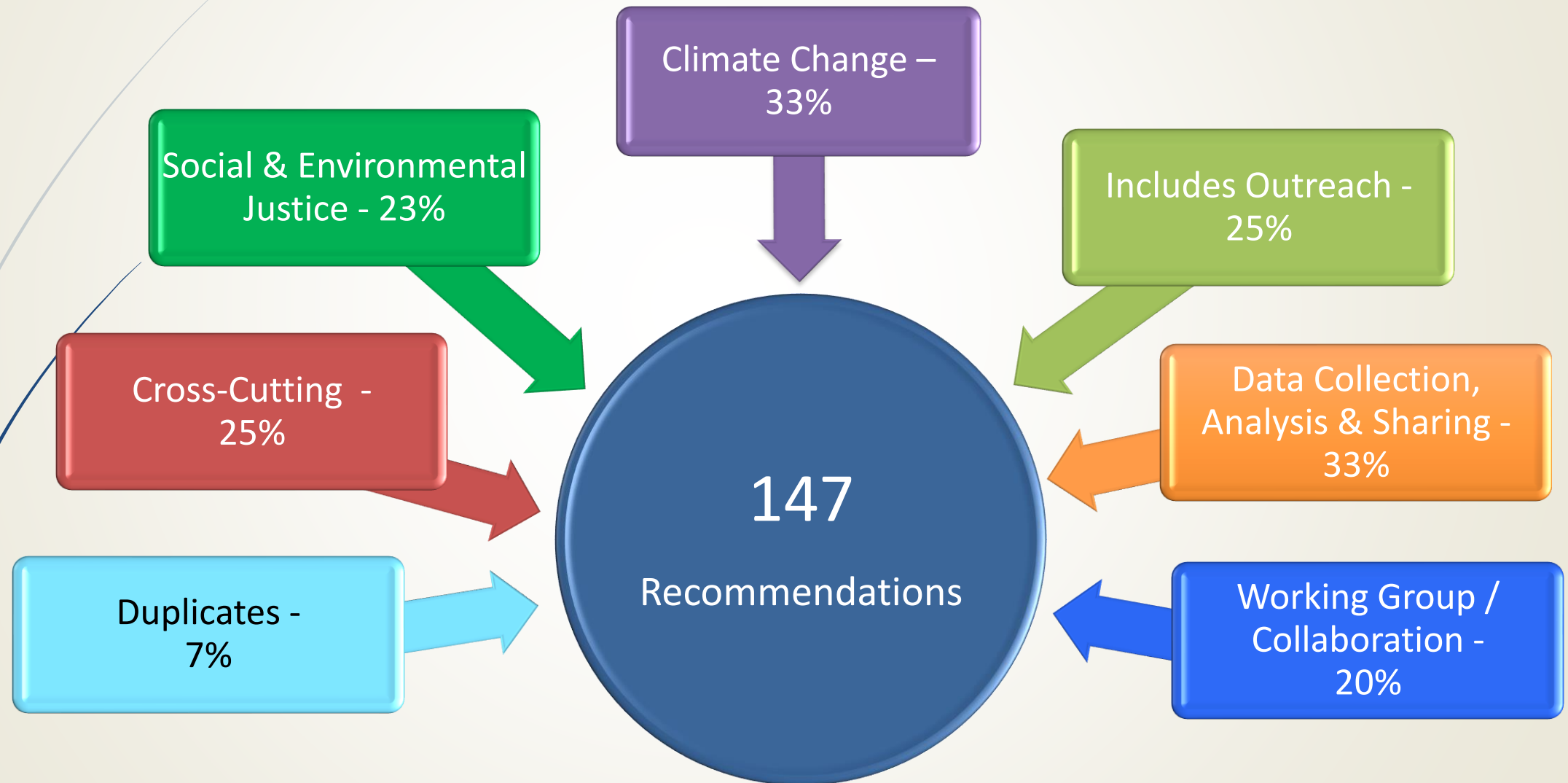
Recommendations

Water Sustainability

- Statewide Water Sustainability assessment
- Regional recommendation and funding requests to address water shortfalls and concerns
- Evaluate impacts of climate change on reservoir evaporation
- Develop template water ordinances to assist community during times of water emergencies
- Update the State Drought Plan
- Improve Water reporting

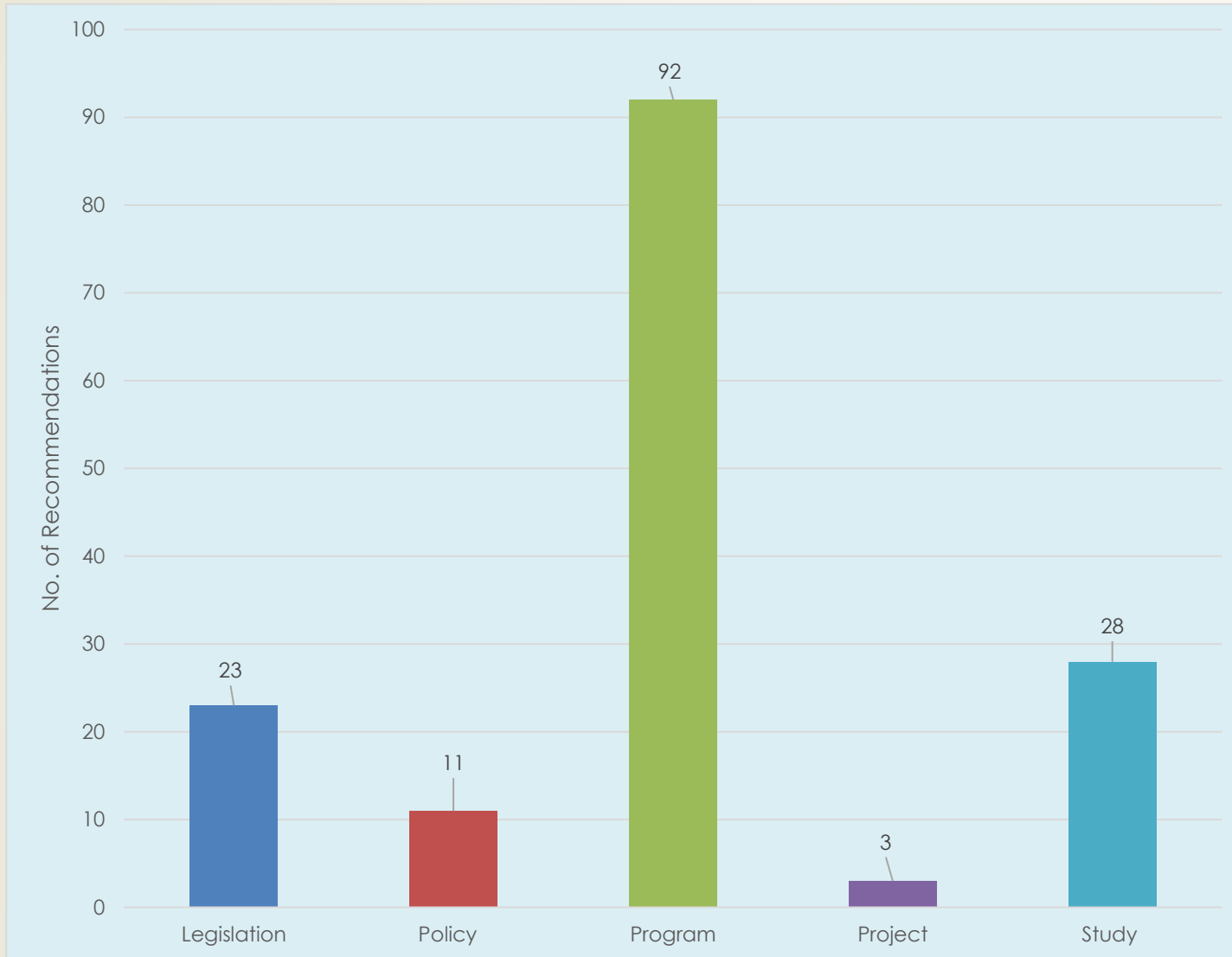


Overarching Recommendations



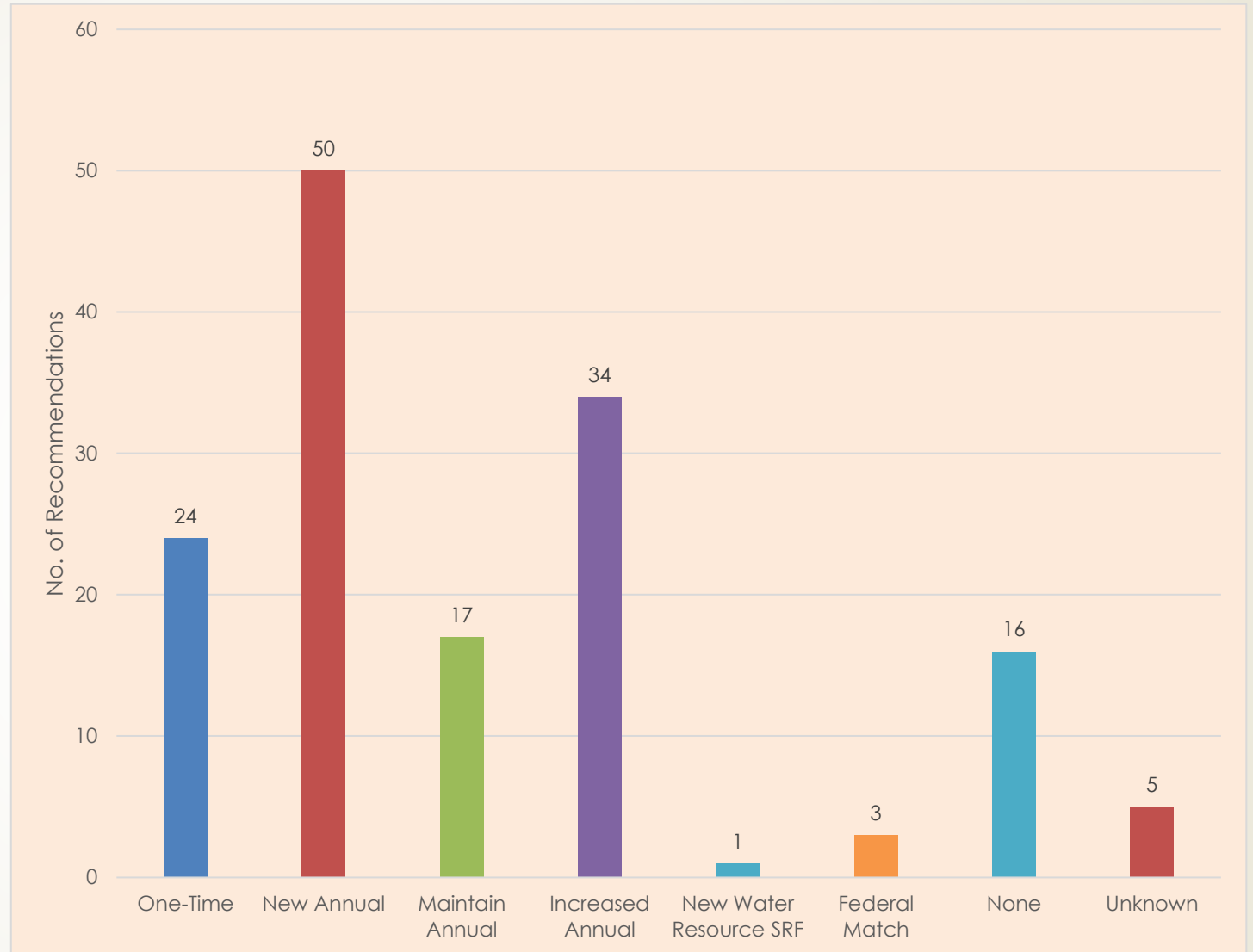
Example Cross-Cutting Recommendations



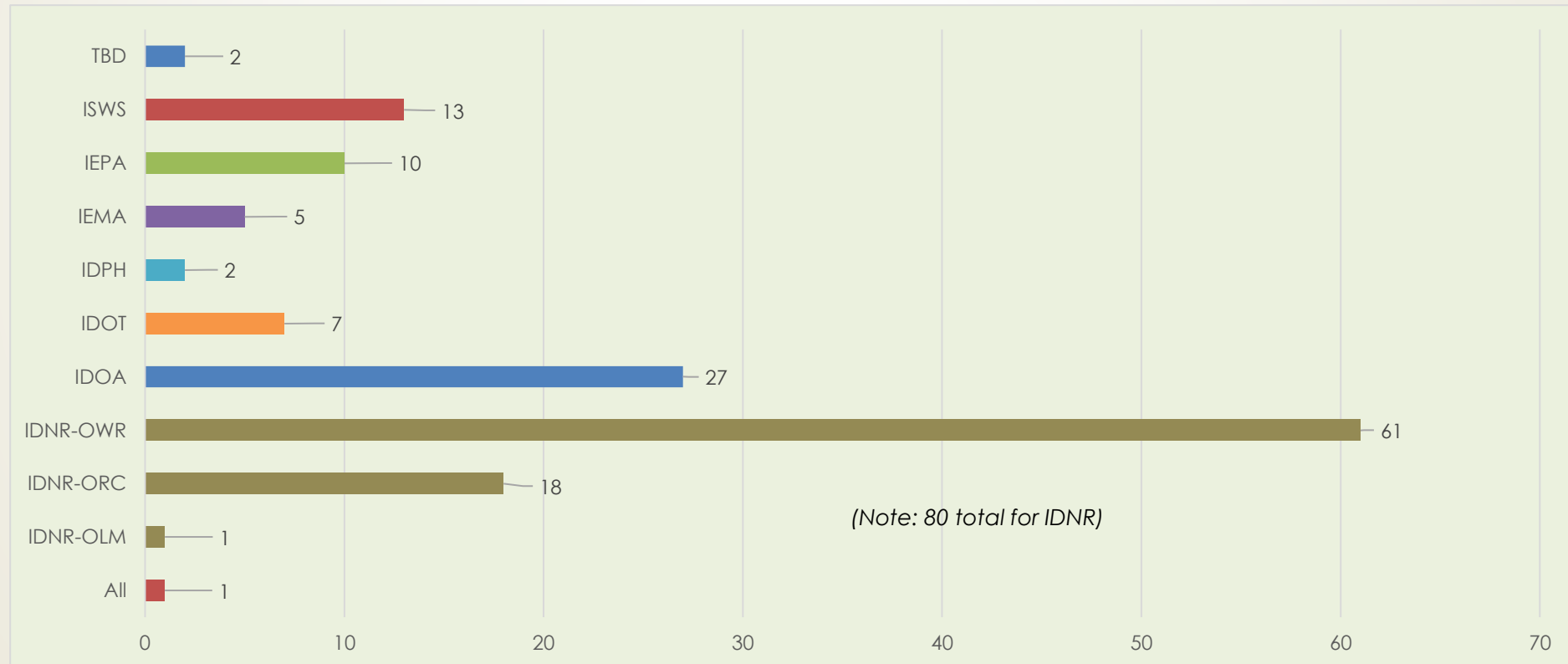


Distribution
of Action
Needed

Distribution of Funding Needs



No. of Recommendations for Each Lead Agency

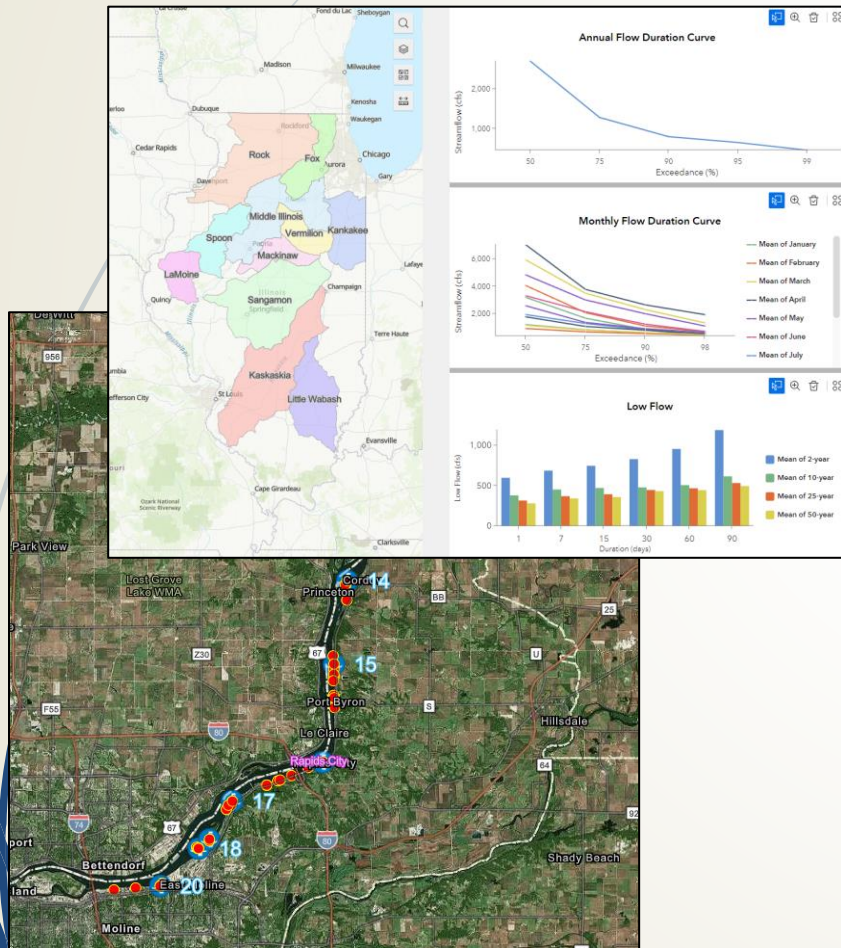


- ▶ Stay informed of our current efforts and your future opportunities to participate at:

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

Keep up to date!

State Water Plan's Future?



Source: IDNR & ISWS Web maps

General Assembly
Passes Needed
Legislation

Task Force and
Committees
Continue to Meet

Task Force is
Funded

Continue Updating
Website

IWIC Launches

General Assembly
Funds
Recommendations

Measure Results

Quarterly/Annual
Status Reports

"Paper" Report
every 10 years

Measuring Results & Quarterly Reporting

Progress 147
Total Recommendations 26
Recommendations Started 29%
Average Progression If Started 6%
Average Progression Overall 10
Sections Reporting

Task	Responsible Party	Progress	Due Date	Description	Funding Needs	Restrictions / Obstructions	Priority
1				Prioritize services to underserved communities	\$0	OWR Staff Availability	1
2				Determine sustainable water yield for various scenarios and share online	\$250,000	ISWS availability	2
3				Establish and support regional water sustainability plans, including initiating #6 this year	\$30,000 annually/region	Funding and staffing levels	3
4				Study evaporation impacts from climate change and planned contractual work for State Fiscal Years 2026-2027 with ISWS	Estimated \$125,000	Staffing availability at the IL State Water Survey	5
5				Develop minimum stream flow protection for high-priority watersheds during emergencies	tbd	Participant Availability	4
6	Wei Han wei.han2@illinois.gov	0%	12/31/2030	Update IL Drought Preparedness and Response Plan	tbd	OWR Staff Availability	6
7	Walt Kelly wkelly@illinois.edu	0%	6/30/2025	Improve water use accuracy with outreach and metering	\$50,000	Funding in FY24-25	7

Next Task Force Meeting **Oct. 17, 2023**

Website Development & Updates

Department of Natural Resources

Illinois DNR > Water Resources

State Water Plan TaskForce

2022 Illinois State Water Plan: [\(Link to Report\)](#)

Development of the 2022 State Water Plan website: [\(Link to website\)](#)

Future Task Force Meetings

- April 10, 2023 at 1:30 PM - Virtual
- July 10, 2023 at 1:30 PM - Virtual
- October 16, 2023 at 1:30 PM - In person, location to be determined

Virtual Meetings - [Link](#)

Meeting Call in: 1-312-535-8110

Meeting number: 2452 429 3075

Password: WINTER

[Click here for past meeting details](#)

OWR Home

- Office of the Director
- Capital Programs
- Division of Resource Management
- Permits Program
- OWR Public Notices
- Floodplain Publications And Guides
- Contact Water Resources
- Links
- OWR Mobile
- History of Flood Control & Drainage in Northeastern Illinois
- History of the Office of Water Resources
- Awards
- Water Resource Law in Illinois
- F.A.Q.'s

Navigation menu: Lake Michigan, Flood Damage Mitigation, Aquatic & Riparian Habitat, Water Use Laws & Regulations, Recreation, Data Management, Erosion & Sedimentation, Navigation.

State Water Plan Implementation Progress Summary

Statistics summary/dashboard coming soon.

Plan Implementation Highlights from this Quarter

- (Highlights to be added here, coming soon!)

State Water Plan Contacts

For general questions relating to the State Water Plan or the State Water Plan Task Force, please contact Wes Cattoor at wes.cattoor@illinois.gov or 217-782-4847.

The critical issues, lead agencies and contact information are shown in the table below. Click on the topic for more details.

#	Issue	Lead Agency	Lead Individual	Email
1	Water Quality	IEPA	Michael Brown	Michael.L.Brown@illinois.gov
2	Climate Change	ISWS	Dave Kristovich	dkristo@illinois.edu
3	Integrated Water Management	OWR	Loren Wobig	loren.wobig@illinois.gov
4	Long Term Funding	IEPA	Chris Davis Gary Bingenheimer	
5	Water Sustainability	OWR	Wei Han	Wei.Han2@Illinois.gov
6	Lake Michigan	OWR	Ania Bayers	Ania.Bayers@illinois.gov">
7	Flood Damage Mitigation	OWR	Terra McParland	terra.mcparland.@illinois.gov
	Aquatic & Riparian			

2022 Illinois State Water Plan

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

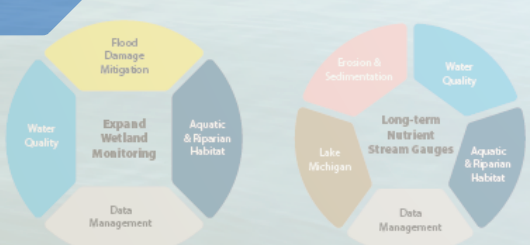
13 Critical Issues



147 Recommendations

Issue	Recommendation	Lead Agency	Funding	Action
State agencies and stakeholders lack the ability to access and share common data, tools, plans, knowledge, and resources in a unified approach.	Work with the University of Illinois to establish, fund, and staff an Integrated Water Information Center (IWIC) in the Prairie Research Institute in 2023 to serve as a library of water-based information, programs, and technology to connect researchers to stakeholders. (\$5.7M Yr 1 and \$3.9M Yr 2). Success is measured by the development of a program management plan, development of IWIC position descriptions, hiring of staff, and determining an annual budget by 2024.	IDNR-OWR	New Annual	Legislation

43 Cross-Cutting Recommendations



Quarterly Implementation Updates to Include:

- Identified Recommendation
- Lead Agency and Contact
- Estimated % Complete
- Description of Status
- Funding Needs
- Restrictions/Obstructions

Questions?

Stephen C. Altman, P.E., CFM
 Manager, Division of Resource Management
 IDNR – Office of Water Resources
Steve.Altman@illinois.gov

Future of the Water Plan

Task Force Is funded	Task Force and Committees Continue to Meet	General Assembly Funds Recommendations
Continue Updating Website	IWIC Launches	Measure Results
General Assembly Passes Needed Legislation	Quarterly/Annual Status Reports	'Paper' Report every 10 yrs

2022 Illinois State Water Plan

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

Plan Mission

Develop a concise plan for addressing the water issues facing the state in an efficient

- Identify critical issues
- Develop plans to address issues
- Implement recommendations
- Reevaluate critical issues and needs

Plan Purpose

The 2022 Illinois State Water Plan provides a blueprint for meeting current and future water use challenges by identifying actions to ensure sustainable, safe, and equitable use of water resources through planning, legislation, stewardship, development, and education. The Plan was cooperatively developed by state agencies, institutions, and stakeholder groups (collectively called the State Water Plan Task Force), with input from public participants, and may be implemented through legislation, policy, agency programs, projects or studies. The Plan is organized by Critical Issues (i.e., challenges) and recommendations for addressing

Lead Agency	Lead Individual	Email
IEPA	Michael Brown	Michael.L.Brown@illinois.gov
ISWS	Dave Kristovich	dkristo@illinois.edu
OWR	Loren Wobig	loren.wobig@illinois.gov
IEPA	Chris Davis Gary Bingenheimer	Christine.Davis@illinois.gov Gary.Bingenheimer@illinois.gov
OWR	Wei Han	Wei.Han2@illinois.gov
OWR	Ania Bayers	Ania.Bayers@illinois.gov
OWR	Terra McParland	terra.mcparland@illinois.gov
ORC	Brian Metzke	brian.metzke@illinois.gov
OWR	Steve Altman	steve.altman@illinois.gov
Navigation	IDOT	Brian McCoy
Erosion & Sedimentation	DOA	Michael Woods
Data Management	ISWS	Laura Keefer
Recreation	ORC	Seth Love Brennan Caputo

Water Use Laws & Regulations

Navigation

Erosion & Sedimentation

Data Management

Recreation

For general inquiries on the plan or the task force, contact Wes Cattoor at wes.cattoor@illinois.gov



ILLINOIS
DEPARTMENT OF
NATURAL
RESOURCES

