Comprehensive Update of the Arkansas Water Plan

Helping Arkansas Achieve a Safe and Reliable Water Resource Future

November 29, 2012

Agenda

- Welcome & Introductions
- Arkansas Water Plan – *Why is it important and what has been done so far?*
- Arkansas Water Plan Update Process and Overview of the Major Technical Work
- How to Follow the Update to the Arkansas Water Plan and Additional Discussion

Welcome and Introductions

Introduction to the Planning Team

CDM Smith

C J R W
cranford
johnson
robinson
woods
fiftieth year

Arkansas WATERplan
Essential For Life

Purpose of Tonight's Meeting?

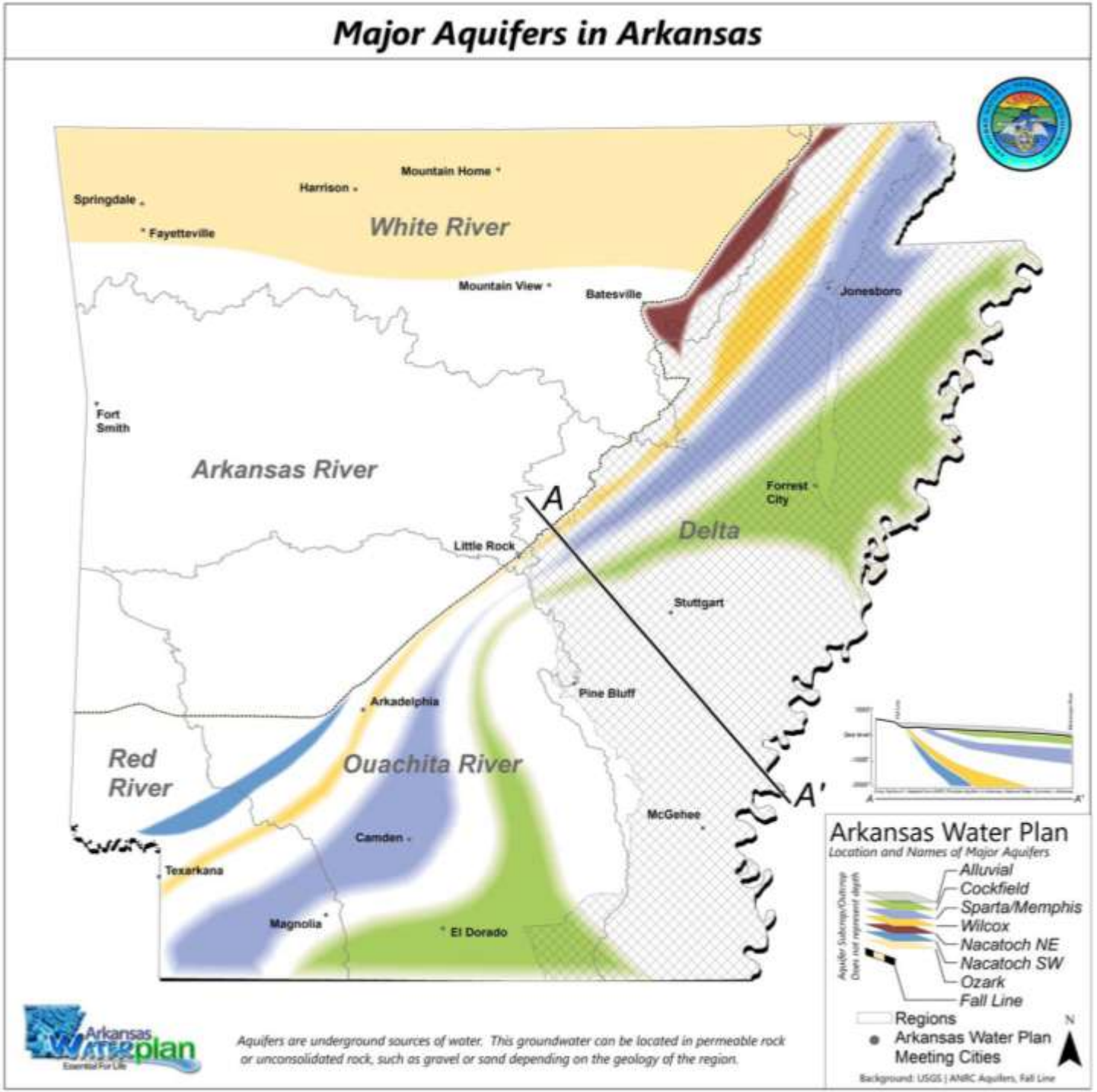
Learn more about our water resources and provide an overview of the Arkansas Water Plan Update

- Discuss why its important to have a water plan
- Review a short history of water planning in Arkansas
- Provide you an opportunity to ask questions and share your thoughts about water resource planning
- Outline the major steps in the water planning process
- Provide you with information to allow you to follow and continue to be involved in the ongoing process to Update the Arkansas Water Plan

"If there is magic on this planet, it is contained in Water"

Loren Eiseley

Major Aquifers in Arkansas



Arkansas Water Plan

Charting the Path to a Safe and Reliable Water Future

- What are some of the major **questions** that you have about Arkansas Water?
- Are there any **specific water issues** or needs that you would like to see the Water Plan address?

Comprehensive Update of the Arkansas Water Plan

Draft Vision, Mission, and Goals

Draft Vision for Managing Water Resources in Arkansas

Water is vital to the prosperity and health of Arkansas's people and their natural surroundings. As such, water must be managed in a sustainable manner to support local and state economies, protect public health and natural resources, and enhance the quality of life of all citizens by applying appropriate policies and best practices with limited regulation and preservation of private property rights.

Draft Mission of the Arkansas Water Plan

The Arkansas Water Plan is the State's comprehensive planning process for the conservation, development, and protection of the State's water resources, with a goal of long-term sustainable use for the health, well-being, environmental, and economic benefit of the State of Arkansas. The Arkansas Water Plan will achieve the following goals.

Draft Goals

- Optimize the use of surface and groundwater for the differing economies of the unique regions of the State.
  - Reliably meet agriculture water needs.
  - Reliably meet municipal & industrial water needs.
  - Manage water resources in a manner that protects the ecological needs of fish and wildlife.
  - Reliably meet the water quantity and quality needs to help support navigation, recreation, and tourism.
- Utilize the best available science, data, tools and technologies to support water resources decisions.
  - Employ the latest supply management and water efficiency technologies among the different sectors of use including residential, commercial, industry, natural resources and agriculture.
  - Identify and address emerging water resource management needs as identified through the water planning process.
  - Use best available science and data to update and implement the Arkansas Water Plan, and identify and address data gaps and needs.

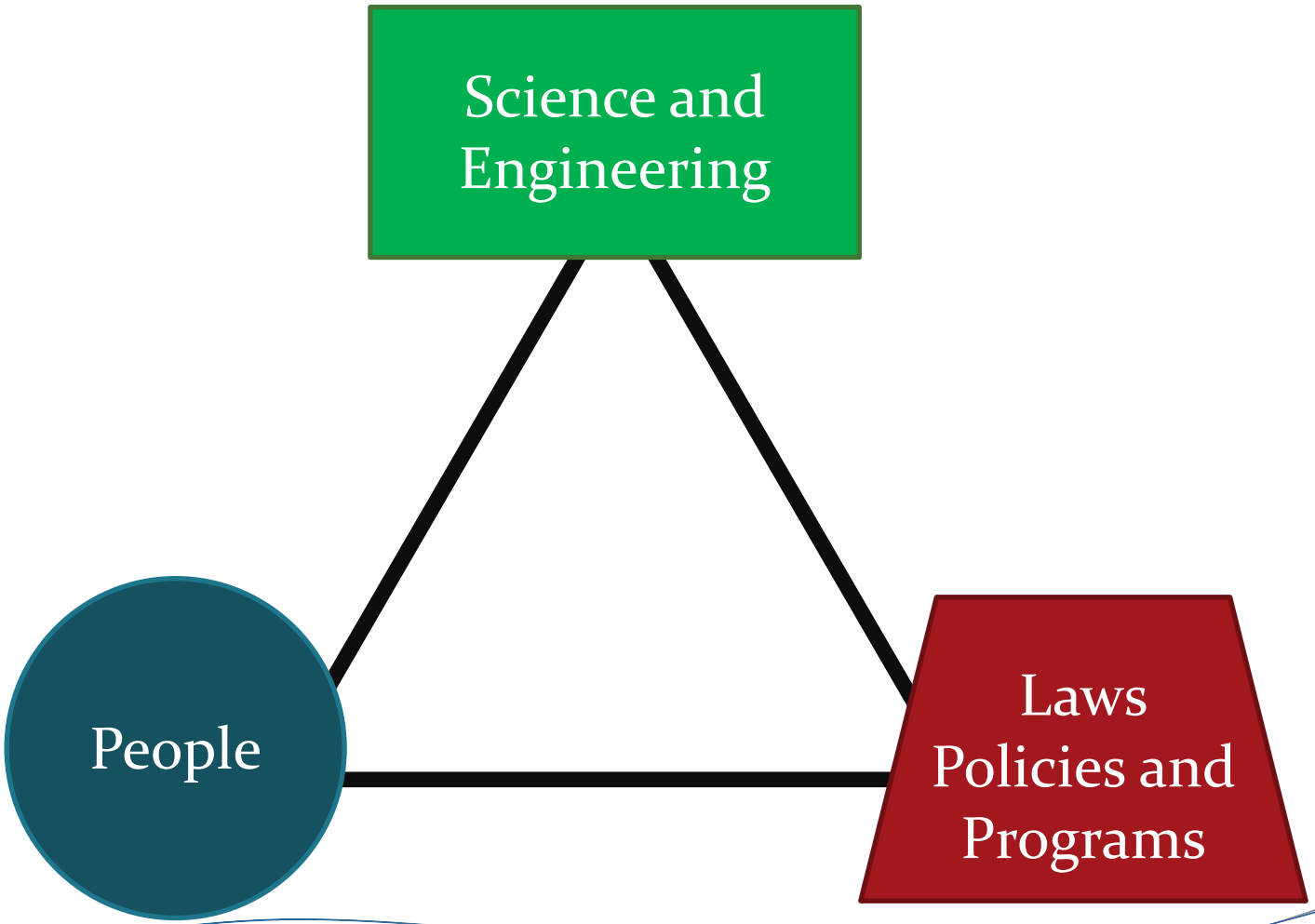
October 18, 2012 Draft

Please note we will revisit these questions at the end of the presentation!

Arkansas Water Plan

Why is it important and what has been done so far?

What is the Arkansas Water Plan?



What is the Arkansas Water Plan?

- A comprehensive program for the orderly development and management of the State's water and related land resources
- The State policy for the development of water and related land resources in this State
- A planning framework to be used by all State agencies, commissions, and political subdivisions in all matters pertaining to the discharge of their respective duties and responsibilities as they may affect the comprehensive plan (1975 and 1990 are the most recent planning efforts)

Why is the Arkansas Water Plan Important to our Future?

- While Arkansas has significant water resources --
  they are not infinite
- Water is vital to the social and economic well being of our communities, and our overall quality of life
- A dependable water supply requires
  - Good water supply sources (quantity and quality)
  - The ability to provide this water to our homes and businesses
- The Arkansas Water Plan will provide us with the **science and information** to make **informed decisions** on the best way to **manage water to meet the needs of our citizens and the environment**

Why do we Need to Update the Arkansas Water Plan?

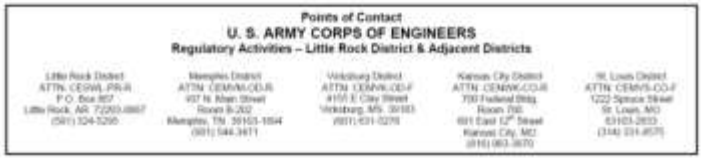
- We depend on water in sufficient quantity & quality for our very existence
- The wise use and protection of this resource is critical for current and future generations
- The existing AWP is over 20 years old
- How we use and value water has changed over this timeframe
- New data and information collection and analysis is needed to define water supply, water needs, and identify potential solutions to meet those needs
- Increasing demands on water resources requires new technical, policy, and financial tools to address identified water resource issues and needs

The Arkansas Natural Resources Commission

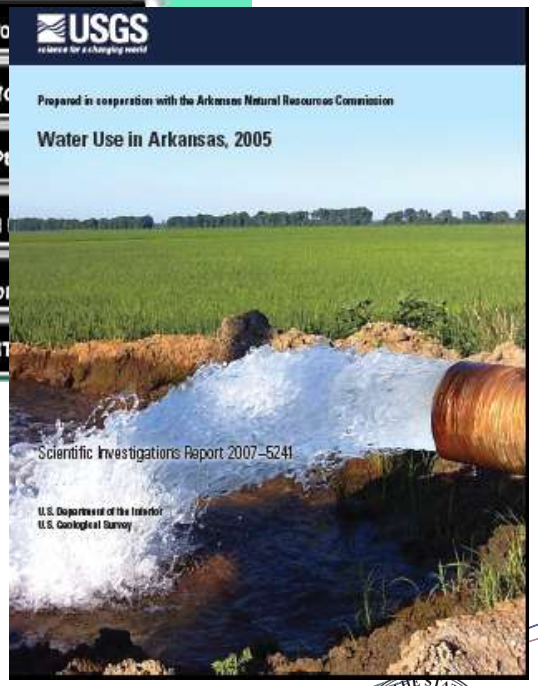
- Establishes policy that makes funding and regulatory decisions relative to:
  - soil conservation
  - nutrient management
  - water rights
  - dam safety
  - water resources planning and development
- Composed of nine members appointed by the Governor and confirmed by the Senate
- Several other boards and commissions were combined to form the Arkansas Soil and Water Conservation Commission in 1963 and it was renamed to Arkansas Natural Resources Commission in 2005

USACE, USGS, State and Local Entities will be Key Stakeholders for Data Collection and Coordination

Water Resources are complex – we will need the help and understanding of
All Arkansans



US Army Corps of Engineers



Arkansas WATERplan Essential For Life

How did the Update to the Water Plan Start?

- ANRC recognized an essential need to update the Plan
- Speaker Robert Moore convened a legislative water plan study team and appointed Rep. John Edwards to lead the effort to find financing and to guide the development of the update
- Legislative support came together, and the General Assembly appropriated $4 million for the update ($1 million of which came from Arkansas Game and Fish Commission)
- The AWP has a defined delivery date for ANRC rulemaking of November 2014

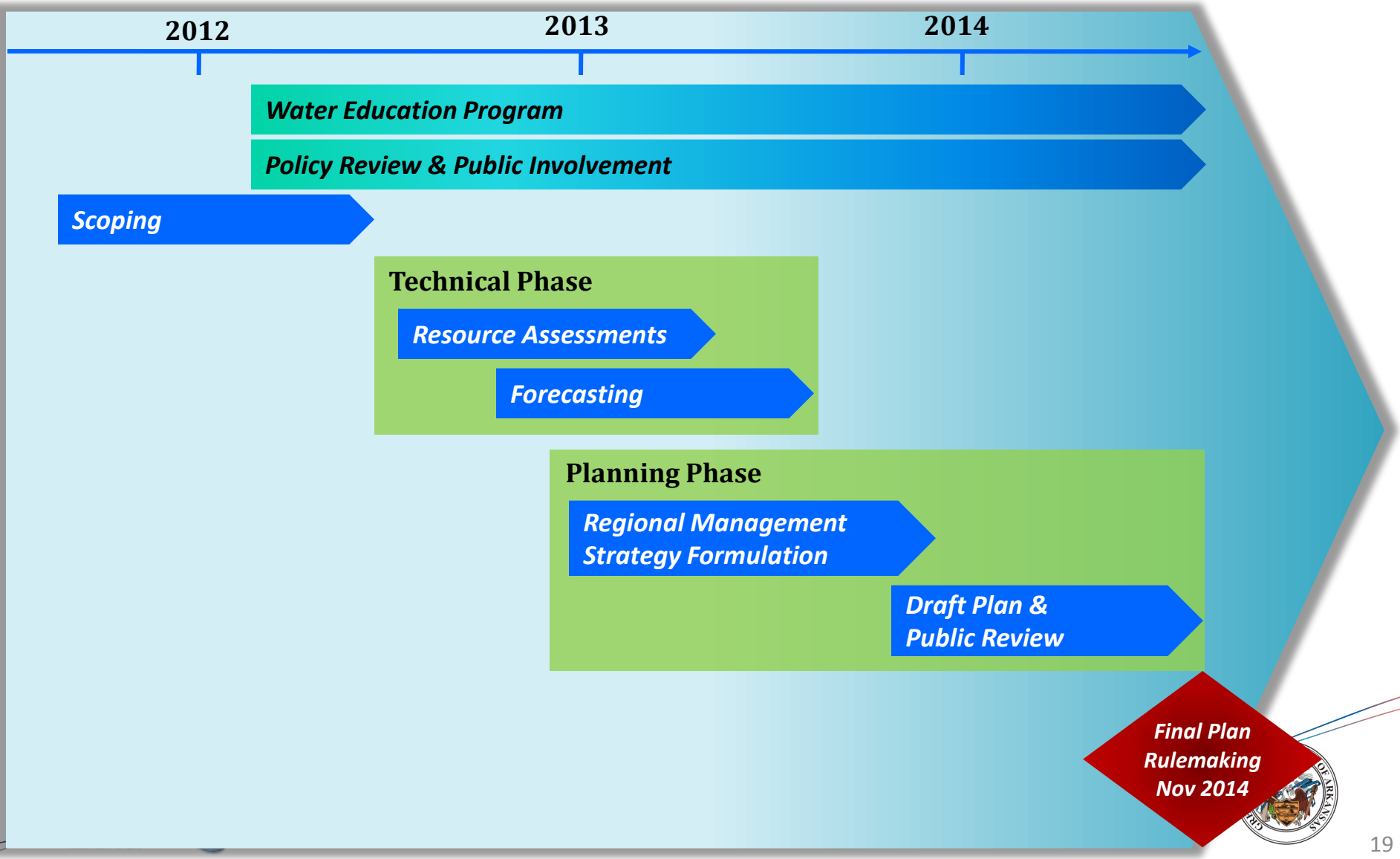
Legislative Policy on the Water Plan Revised in 2011

- Water is vital to the prosperity and health of both people and their natural surroundings
- Water conservation will keep agriculture, industry, tourism, and recreation strong for future generations
- Encourage best management practices, reliable data, and scientific methods for water conservation and management
- Surplus water is underused

Legislative Policy on the Water Plan Revised in 2011

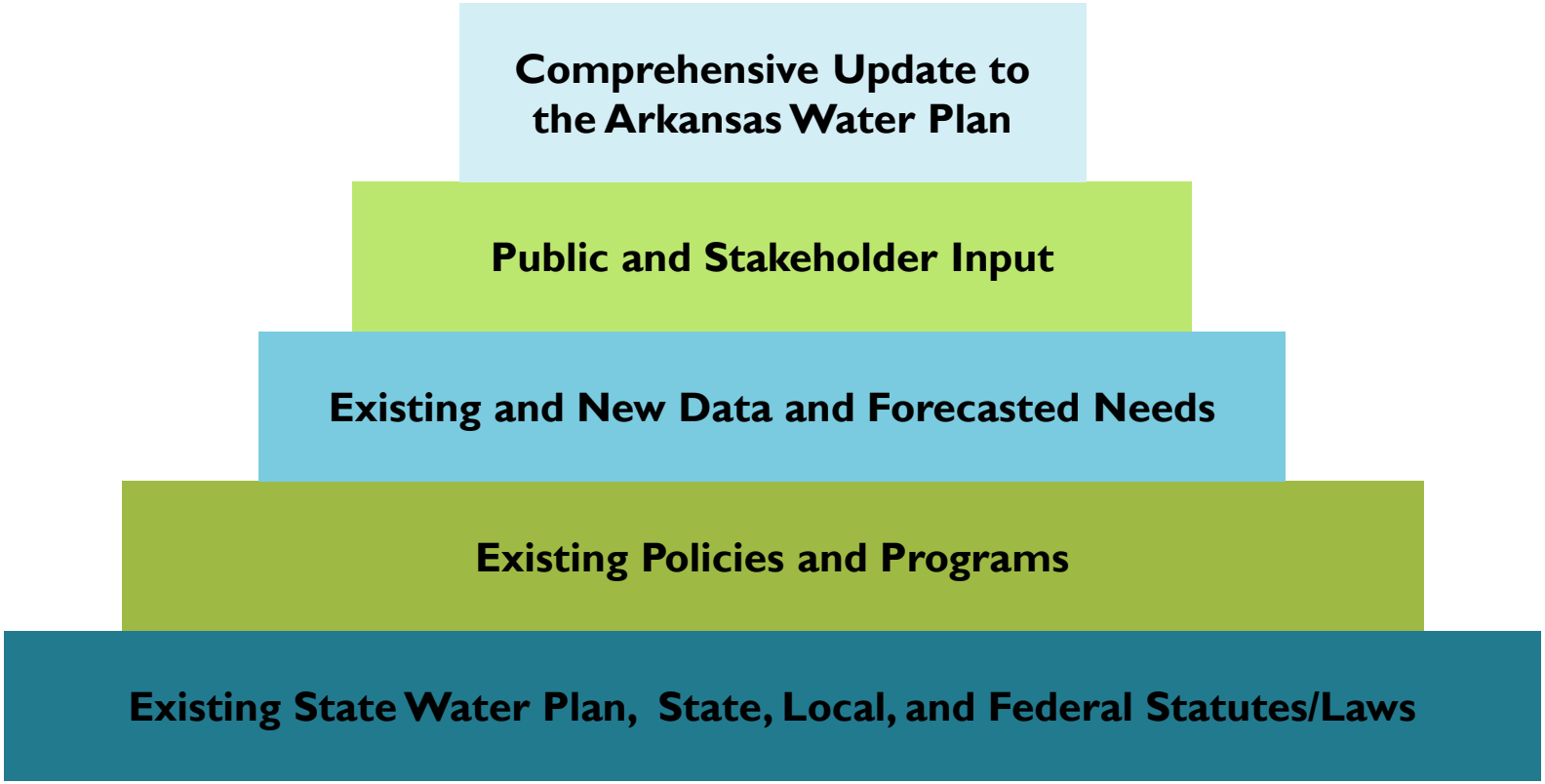
- Groundwater supplies are being used at a rate that will result in aquifer destruction
- Surface water and groundwater supplies must be managed together for maximum effect
- State policy is to permit and regulate the construction of facilities to use excess surface water to:
  - Protect drinking water
  - Protect the rights of all persons
  - Maintain healthy in-stream flows
  - Prevent harmful overflows and flooding
  - Conserve natural resources

Arkansas Water Planning - *Charting the Future*

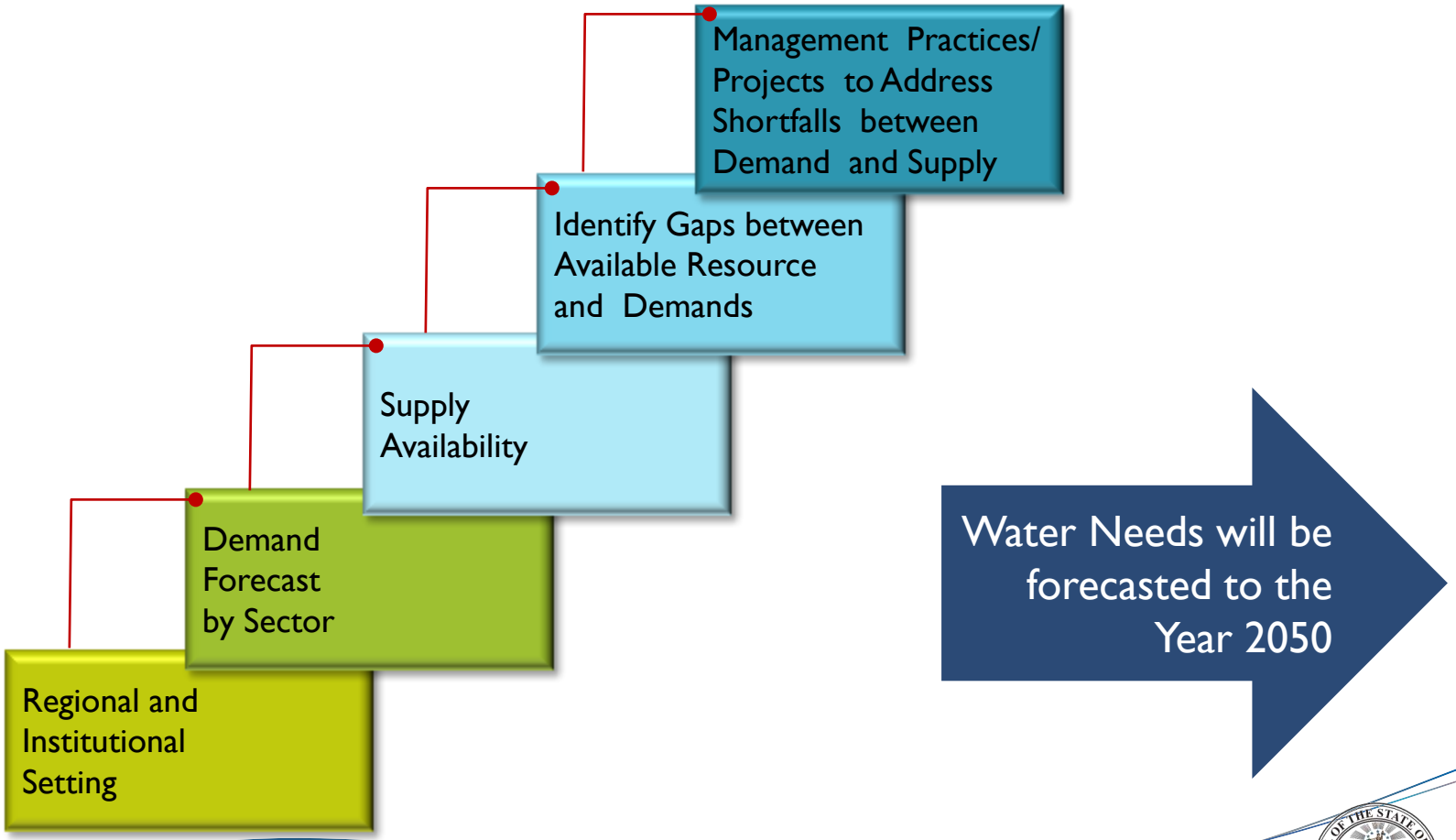


Arkansas Water Plan Update Process and Overview of the Major Technical Work

Building on and Improving Existing Programs and Information



The Major Technical and Planning Elements of the Water Plan Update



Water Demand Forecasting

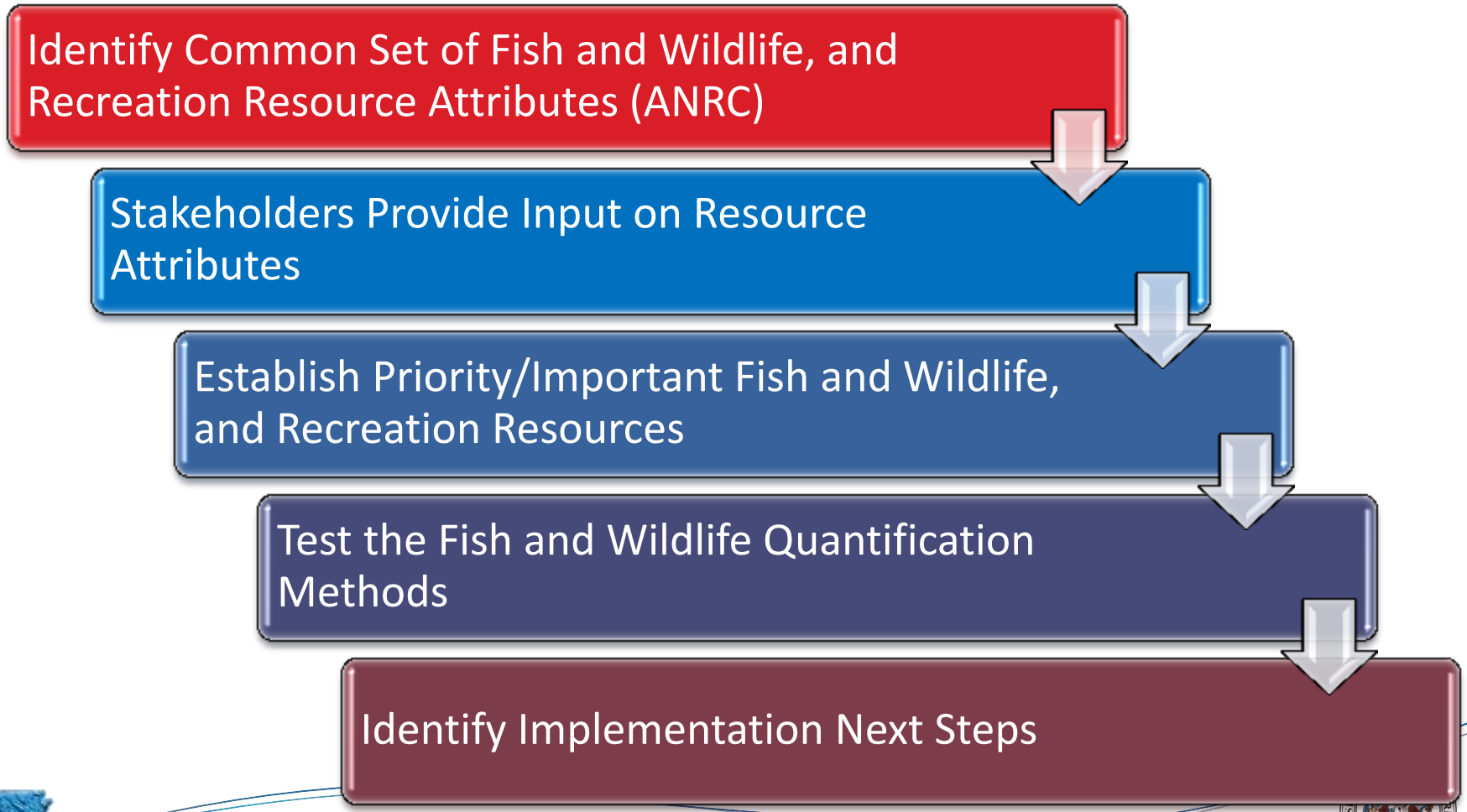
- Will answer the question of how much water do we need?
- Will be completed --
  - By demand sector for planning region
  - By source of supply surface water and groundwater
  - Summarized at the regional and statewide level

Water Supply Assessments

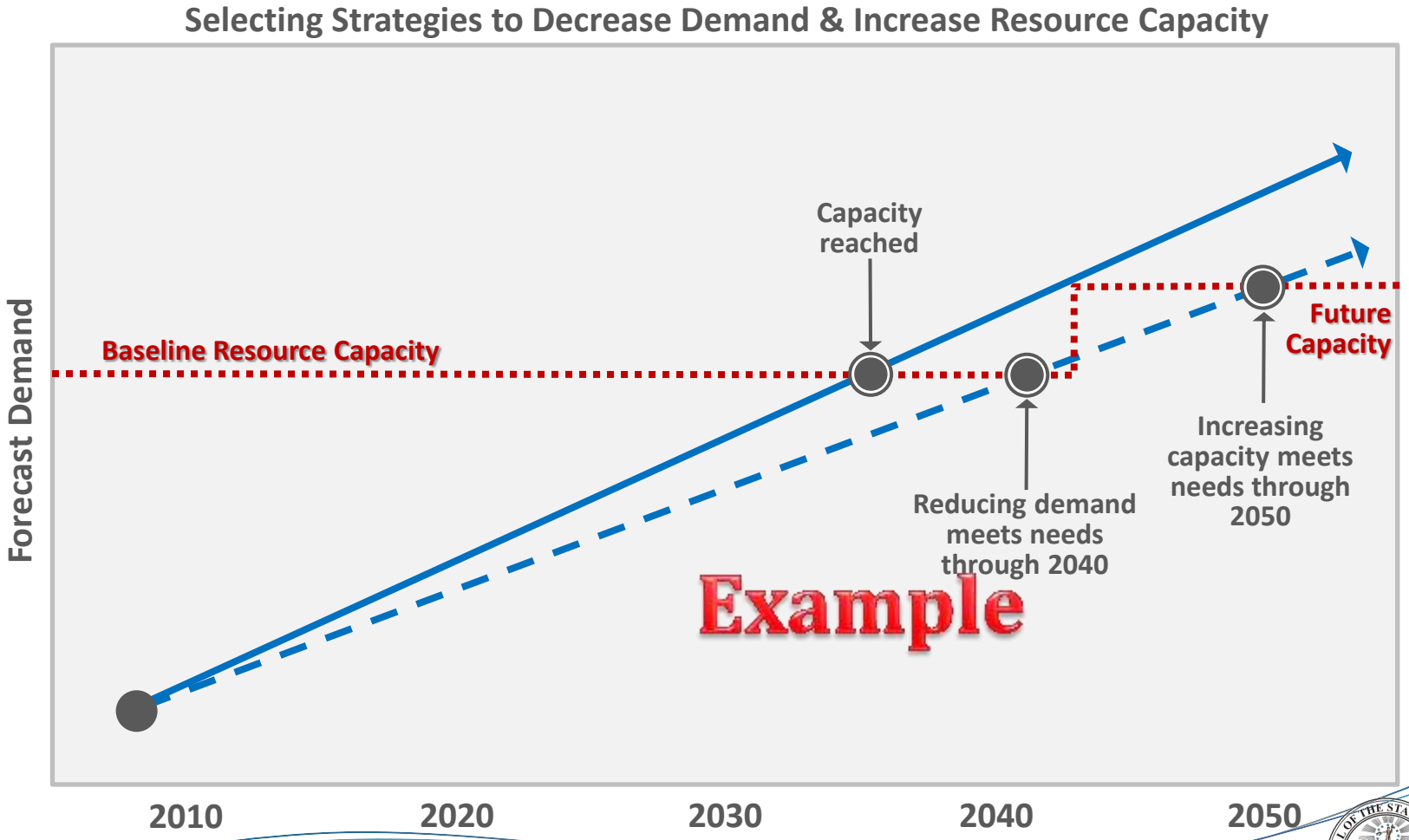
- How much water do we have? What are the capacities of the water resources on which our citizens rely?

  - Data summaries
  - Simulation models
  - Criteria to indicate unacceptable impact
  - Current conditions for baseline assessment
  - Apply future demands and management practices

Fish and Wildlife Flows will be an Important Component to the Water Plan Update

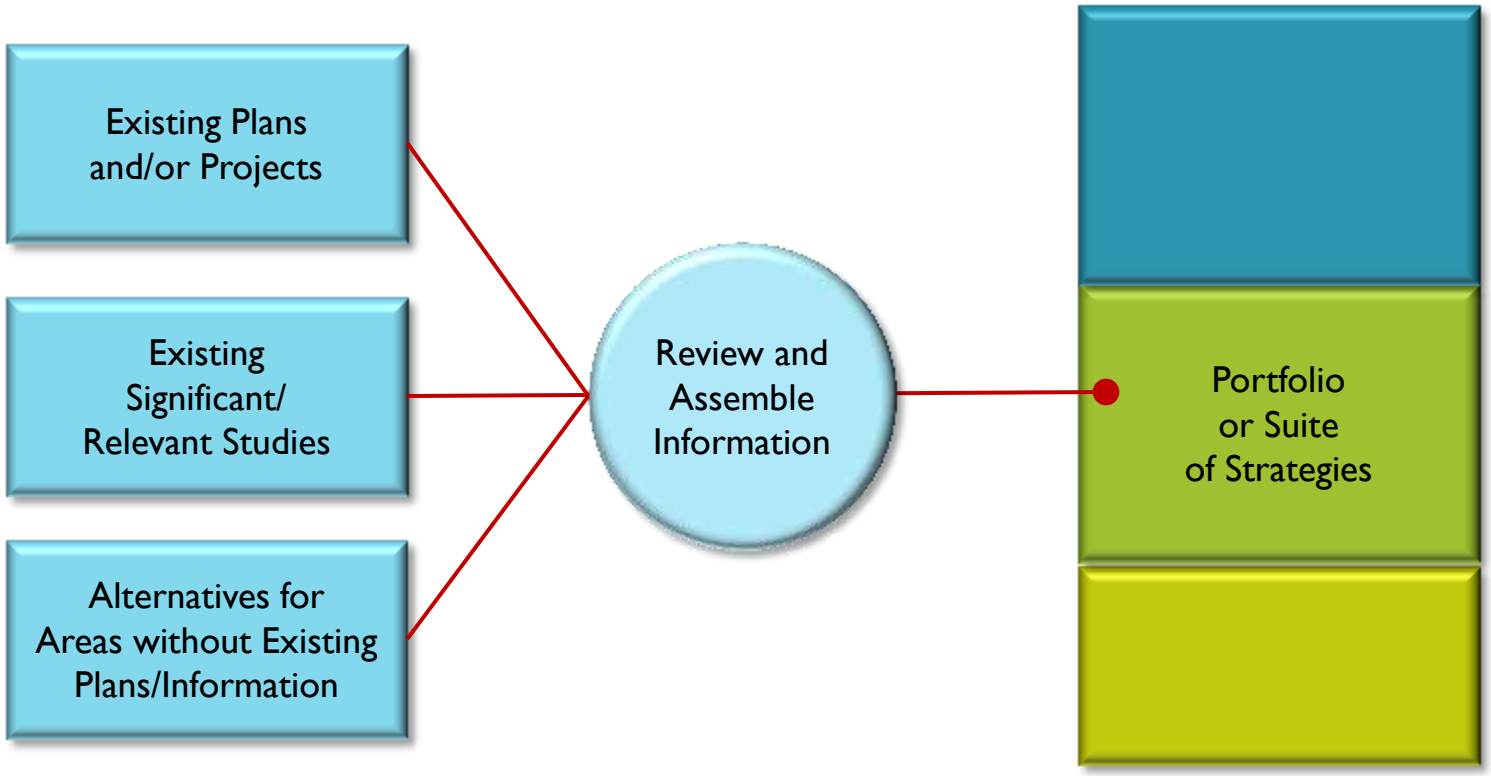


Gap Analysis and Water Supply and Demand Strategies

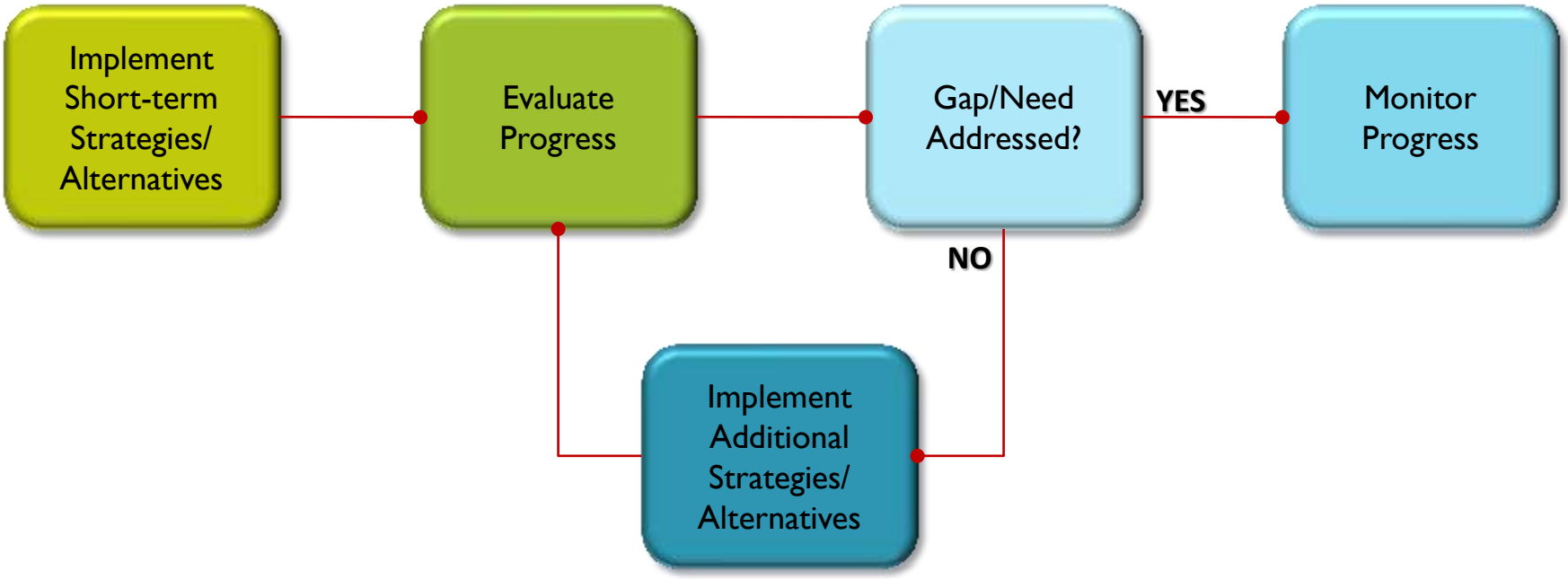


Total Demand Projection (Broken line indicates total demand with conservation)

Identification/Selection of Water Resource Strategies/Management Actions



Creating an Adaptive and Implementable Planning Process – for Ongoing Planning



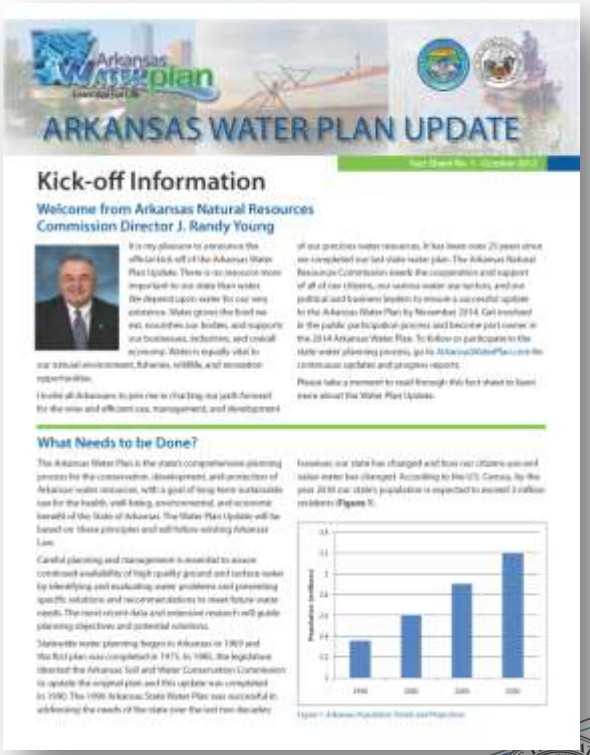
Water Resources Management is Complex – the Arkansas Water Plan Update will provide many answers and recommendations and will provide an ongoing process for longer term issues and needs

How to Follow the Update to the Arkansas Water Plan and Additional Discussion

How to Follow the Arkansas Water Planning Process and Get More Information

- Visit the Water Plan Website at: ARWaterPlan.Arkansas.gov
- Send an e-mail to:
  - ArkansasWater@CDMSmith.com
- Provide us your address and we will send periodic updates
- Visit the ANRC website to follow Commission activities

anrc.arkansas.gov/


ARKANSAS WATER PLAN UPDATE

Kick-off Information

Welcome from Arkansas Natural Resources Commission Director J. Randy Young

What Needs to be Done?

Arkansas WATERplan Essential For Life

Key Contacts

- Website:

  ARWaterPlan.Arkansas.gov

- E-mail:

  ArkansasWater@CDMSmith.com

- Mail:

Arkansas Natural Resources Commission

Attn: Arkansas Water Plan

101 East Capitol, Suite 350,

Little Rock, Arkansas 72201

Public Information and Stakeholder Involvement Coordination and Meeting Plan for 2012-2014

DATE	CITY	MEETING 1: Arkansas Water Plan Update Kickoff Meetings
November 13 6:30 – 8:00 p.m.	Pauline Whitaker Arena-Fayetteville	• Overview of the Arkansas Water Plan Update process • Identify important studies, water management issues and concerns • Obtain input on draft vision and goals for the Arkansas Water Plan Update • Finalize and implement public information and stakeholder involvement and communication process
November 15 6:30 – 8:00 p.m.	ASU Convocation Center-Jonesboro	
November 27 6:30 – 8:00 p.m.	AR Department of Health Auditorium-Little Rock	
November 29 6:00 – 8:00 p.m.	Conference Center-El Dorado	
DATE	**CITY**	**MEETING 2: Existing and Future Water Use/Needs Forecasting**
May/June 2013 Dates TBD	Little Rock Springdale Stuttgart McGehee El Dorado Texarkana Mountain Home	• Present initial summaries of key existing studies and regional "profile" of the area including major water uses, physical and environmental resources, social and economic considerations • Refine vision and goals • Present methodology and initial information on existing uses, and current and future demand forecasting methodology • Discuss initial approach to quantify water quantity and quality • Begin identification of infrastructure, funding, and policy needs
DATE	**CITY**	**MEETING 3: Quantifying Available Water Supplies to Meet Existing and Future Water Use/Needs**
October/November 2013 Dates TBD	Fort Smith Pine Bluff Forest City Jonesboro Arkadelphia Magnolia Harrison	• Present final existing and future water use/needs forecasts • Refine vision and goals • Present initial information on quantification of water quantity and quality • Continue identification of infrastructure, funding, and policy needs • Present initial findings regarding identified shortfalls between available water resources and forecasted needs • Identify preliminary potential solutions and recommendations to address water resource shortfalls
DATE	**CITY**	**MEETING 4: Development of Water Resource Solutions and Recommendations**
February/March 2014 Dates TBD	Little Rock Fayetteville Jonesboro Stuttgart Camden Texarkana Batesville or Mountain Home or Mountain View	• Finalize quantification of water quantity and quality • Finalize draft potential solutions and recommendations to address water resource shortfalls • Finalize vision and goals • Continue identification of infrastructure, funding, and policy needs • Discuss next steps for finalizing the Arkansas Water Plan Update and November 2014 Rulemaking

Arkansas Water Plan

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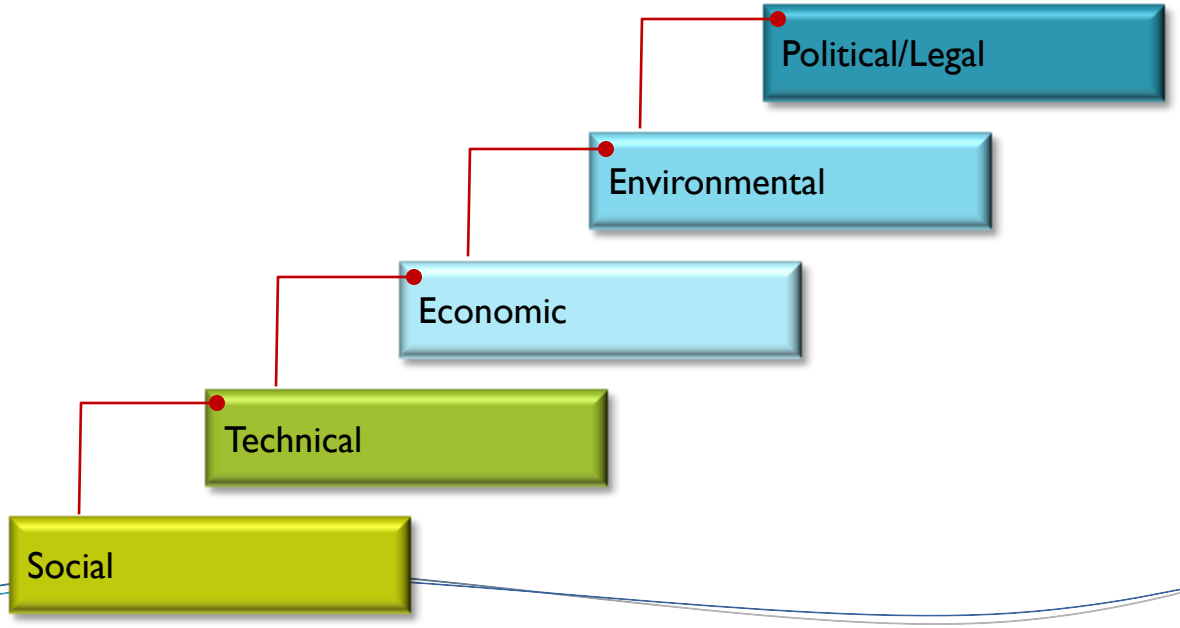

Thank You and Additional Discussion!

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