

Wyoming River Basin Planning



Jodee Pring, Supervisor, River Basin Planning
WY Water Development Office

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Wyoming Water Development Office

AGENCY DIRECTOR

4 DIVISIONS:

- ADMINISTRATION
- PLANNING
 - PROJECT PLANNING
 - RIVER BASIN PLANNING
- CONSTRUCTION
- DAMS & RESERVOIRS



Wyoming Water Development Commission (WWDC)



Select Water Committee (SWC):

- Provides final approval for water development projects
- Statute requires that SWC monitor the program, review project contracts, and prepare legislation
- SWC submits two annual omnibus bills for the Legislature's consideration: planning and construction
- These bills are considered outside of the administrative budget requests and appropriations of the Office
- Legislature must appropriate and approve any expenditures of funds from the accounts

Program Funding

- Severance tax distribution account
- Three accounts:
 - WDA I – New Development – 12.45% not to exceed \$19,297,500/yr
 - WDA II – Rehabilitation – 2.1% not to exceed \$3,255,000/yr
 - WDA III – Dams and Reservoirs – 0.5% not to exceed \$755,000/yr
- Each WDA maintained independently of the other to fund the different categories of projects
- Planning, groundwater exploration and the agency's operating budget are funded out of WDA I
- Funding for River Basin planning projects comes from WDA I

How Planning Projects Come to WWDC

- Sponsors come to the WWDC with an application for a study
 - Level I – Reconnaissance studies
 - Level II – Feasibility studies
- RBP team can come to the WWDC with a specific study/project
 - Statewide

What Guides Wyoming River Basin Planning?

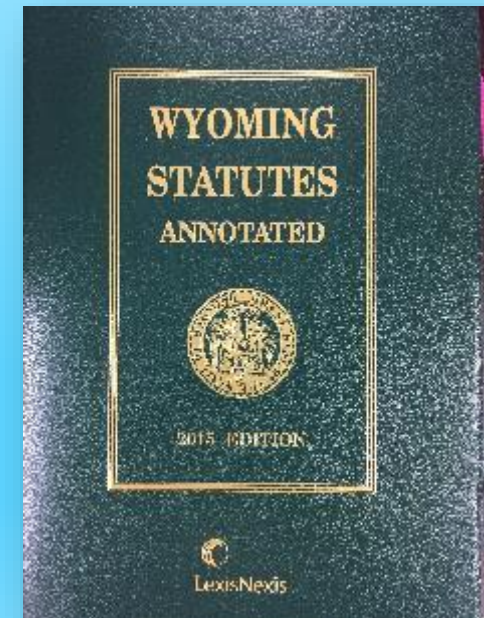
- 1967 Legislature authorized the State Engineer's Office to initiate a State Water Planning Program.
- 1973 First State Water Plan is written and the Interdepartmental Water Conference is formed
- 1997 Legislature authorizes feasibility study that launches River Basin Planning Program
- 2015 Governor's Water Strategy is released



What Guides Wyoming River Basin Planning?

Statutes:

- 41-1-106 Water and related land resources planning commission's responsibility
- 41-2-107 Water resources plans; review; submission to commission
- 41-2-108 Water resources plans; powers of commission
- 41-2-109 Water resources plans; contents
- 41-2-110 Water resources plans; duties of commission



Planning Statutes

41-2-109. Water resources plans; contents.

(a) The water resources plans shall, to the extent deemed practical:

(i) Identify, describe and inventory the **occurrence, amounts, availability and quality** of water resources....

(ii) Identify and describe **prospective needs and demands** for water and opportunities for water development...

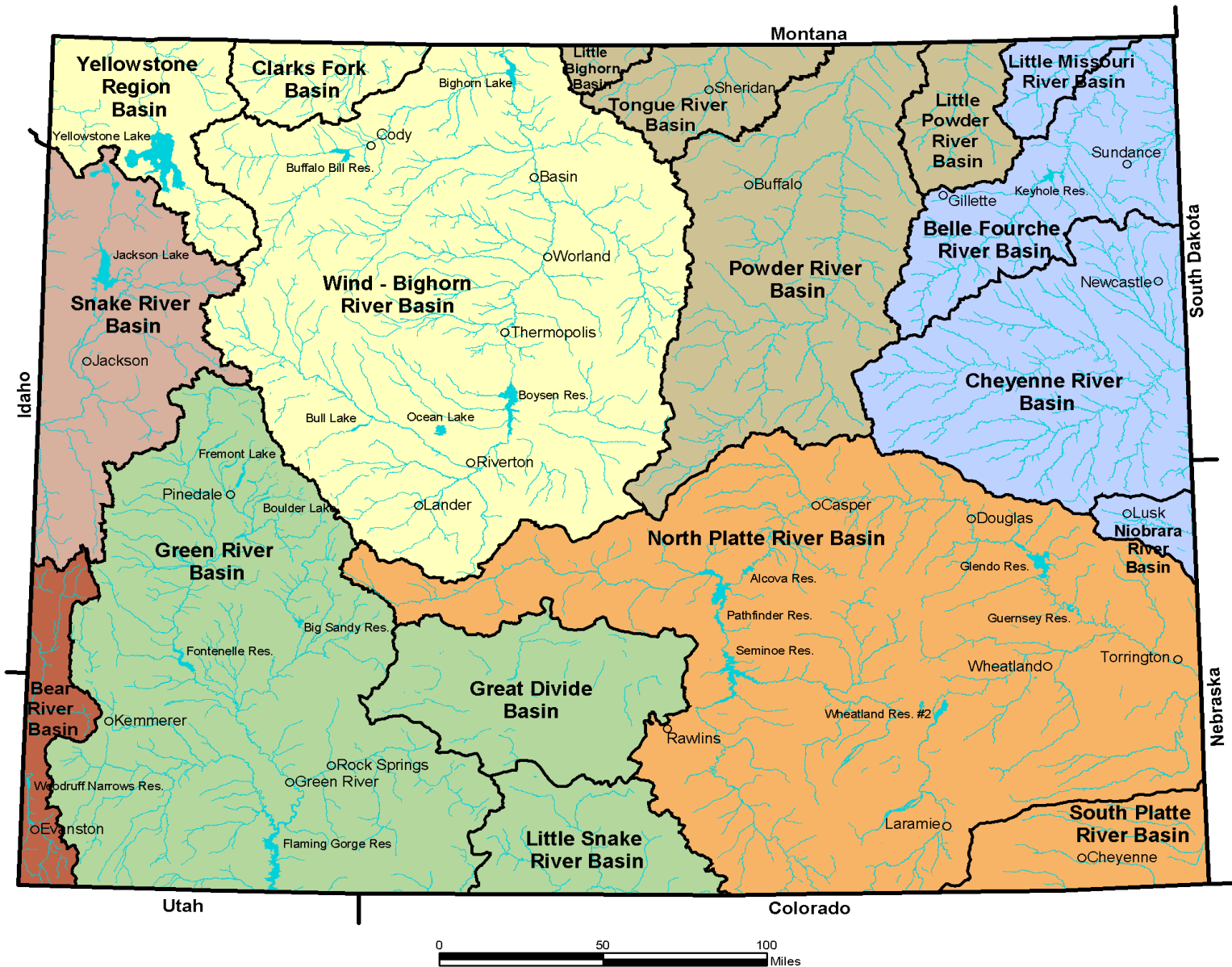
(iii) Identify and specify for each plan appropriate **state, regional and local goals and objectives** for management of water resources...

(iv) **Evaluate and compare prospective and anticipated uses and projects...**

Wyoming River Basin Planning

- The River Basin Planning (RBP) section is responsible for water resource planning which includes watershed plans and river basin plans for the state
- The RBP section consists of three employees with assistance from the Water Resources Data System (WRDS) and the State Engineer's Office (Water Planning Coordinator/Liaison)

Wyoming River Basin Plan Areas



Legend

- Cities
- Major Streams
- Lakes/Reservoirs
- Major River Basins

River Basin Plans

- Bear
- Green/Little Snake
- Northeast
- Platte
- Powder/Tongue
- Snake/Salt
- Wind/Bighorn

Why all the Planning?

Basin Planning Mission Statement: Develop essential information concerning the current status and future availability of water resources in Wyoming

- Inform state water policy and project development
- Provide a proactive stance in the legal arena
- Provide an opportunity for local input on water policy and projects



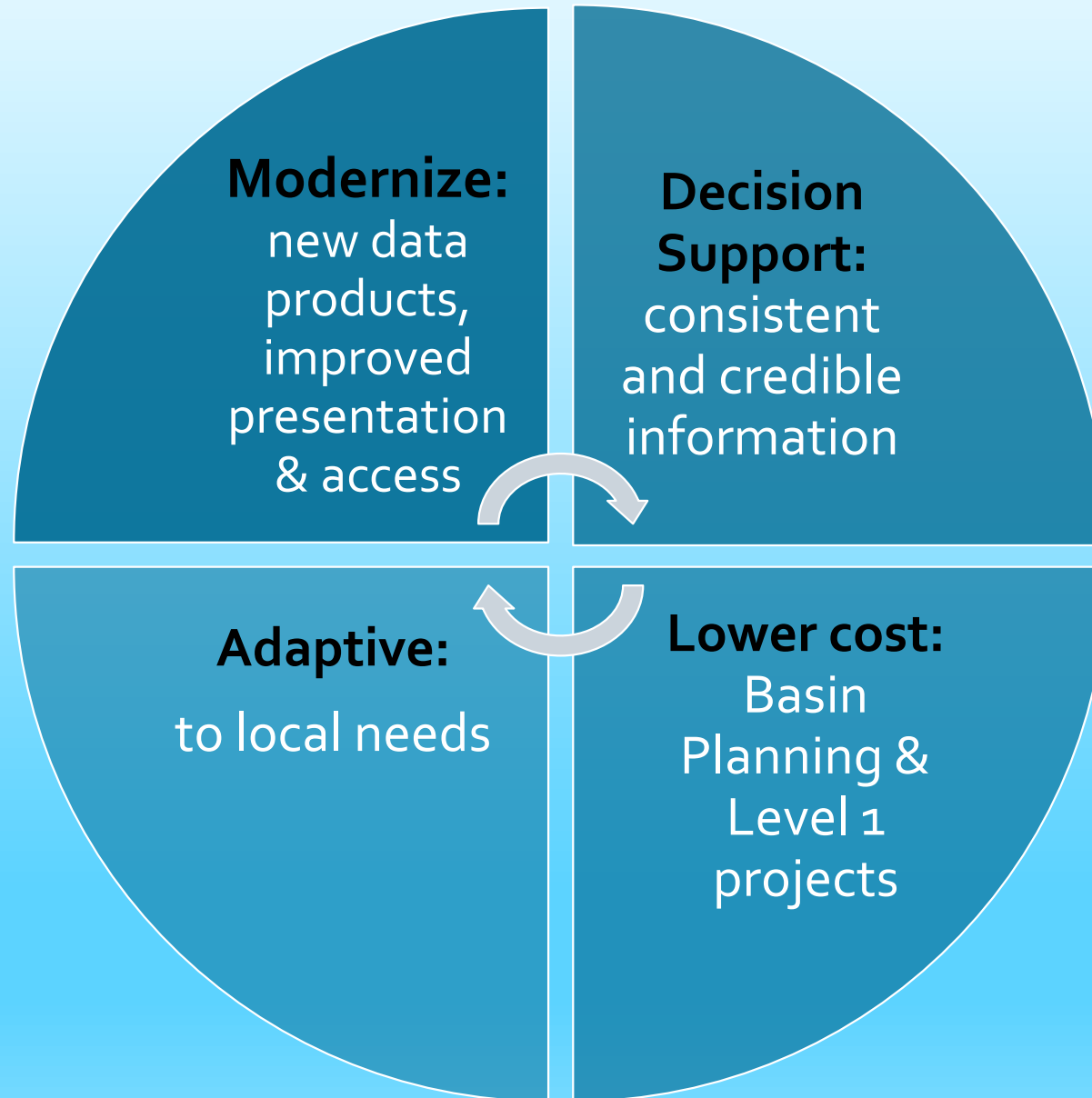
Why all the Planning?

- The State has gone through two cycles of planning.
 - First round took place between 2001 – 2006
 - Second round took place between 2010 – 2018
 - Resulted in lots of valuable information
- AND.....

Why all the Planning?



What does the Future Hold?



What Does the Future Hold?

- What are the questions we need to be able to answer?
- What tools can help answer those questions?

What Are the Questions We Need To Be Able to Answer?

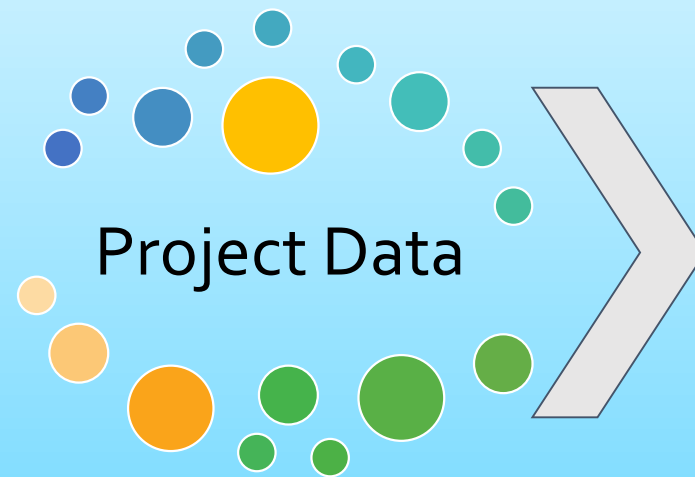
Questions such as:

- What areas are most affected on low water years?
Is there a mitigation plan in place?
- How has water use changed in the last 20-30 years?
What will it look like 20 years from now?
- How can state resources be invested strategically?
How do we reduce costs?
- Is there enough physical water to support a project?
- How does water move across the landscape and what are the conditions of the infrastructure?

Tools To Help Answer Those Questions

- GIS Data Model Implementation Study
- Water Infrastructure Mapping
- Supplemental Water Supply Analysis
- Water Availability Index
- StreamStats

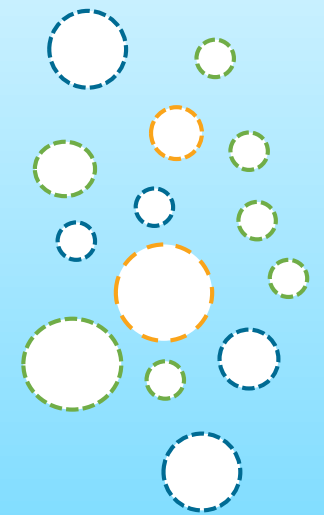
GIS Data Model Study



Current



Future



Water
Systems
Infrastructure
Mapping

Hydrology

Water
Systems

Conditions
Assessment

WWDC
Projects



Supplemental Water Supply Analysis

Statewide look into
water shortages

Local Assessment of
Goals & Opportunities

New Supplies
Developed

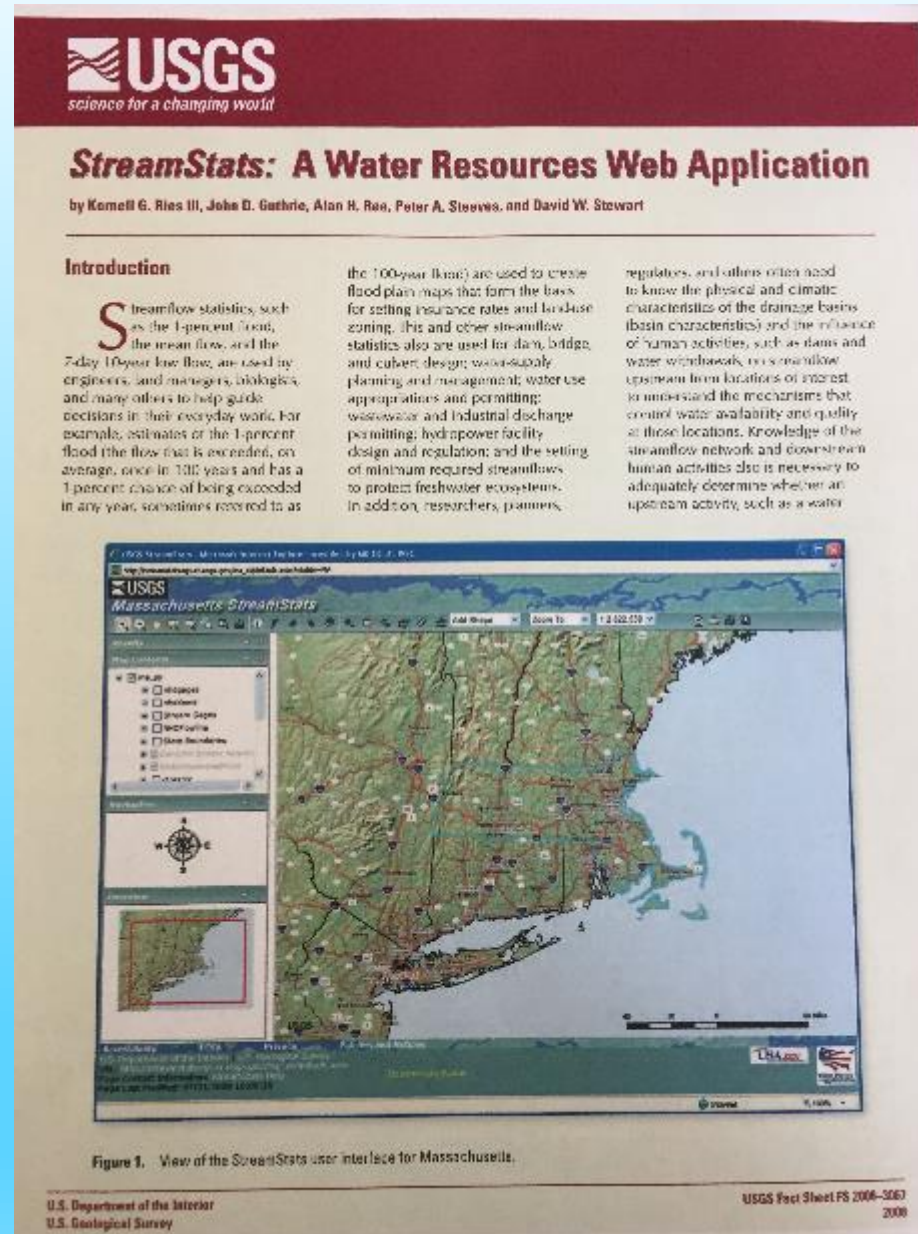


Water Availability Index

- Review of water supply and use intended to identify trends.
- Statewide index provides an active understanding of water supplies, and highlights areas of change within Wyoming.
- Done in-house this would take the place of RBPs in order to minimize cost and provide current, credible information to assess trends.



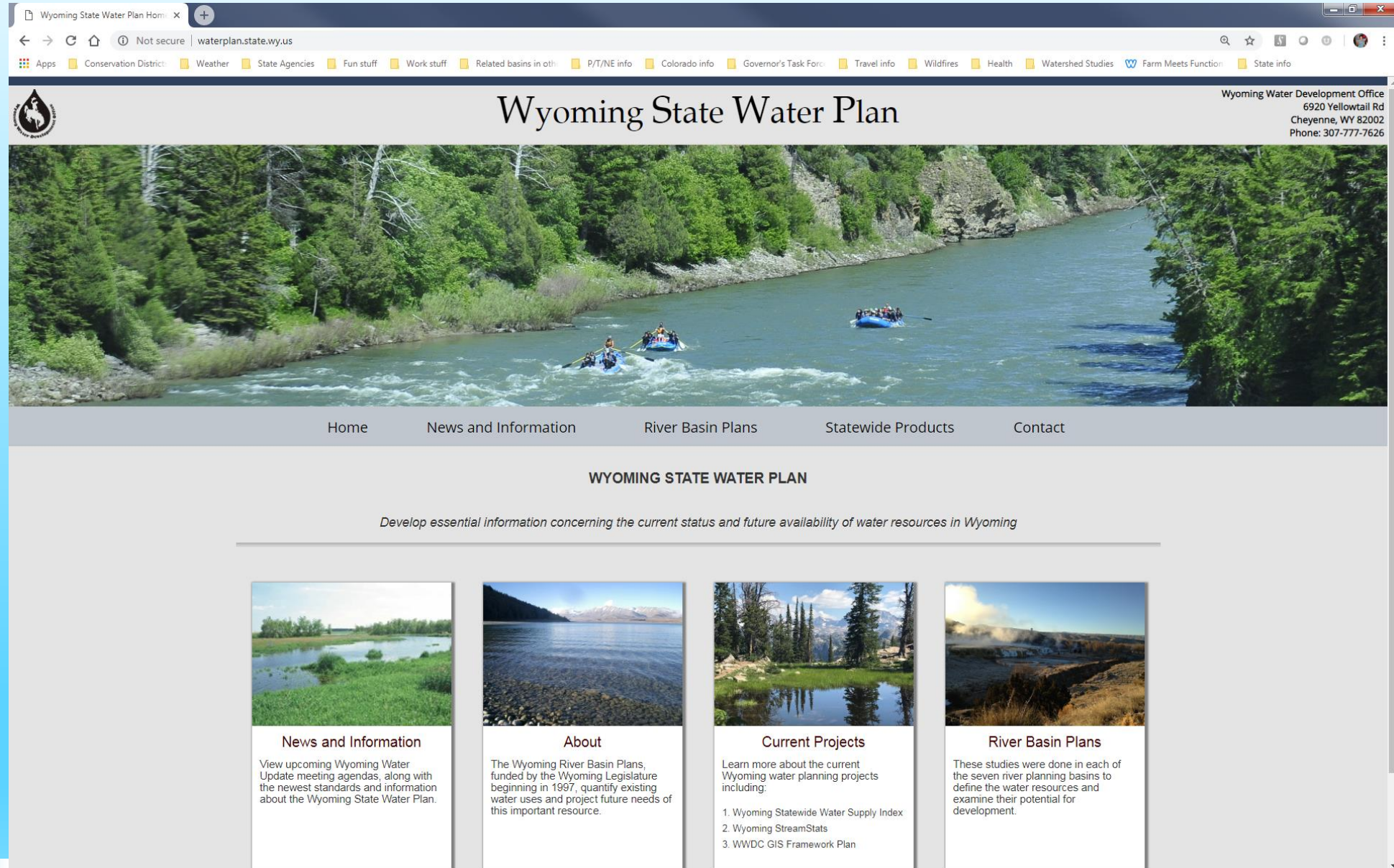
StreamStats



The Path Forward

- In 2018, the Legislature appropriated funding for:
 - GIS Data Model Implementation Study
 - Water Supply Index
 - NHDPlus HR and StreamStats - Phases I and II
- In 2019, the Legislature appropriated funding to complete StreamStats – Phases III and IV

New and Improved Website



The Future of Wyoming RBP

- New, more focused direction for RBP
- Opportunity to modernize and improve the information needed to guide development and decision-making and lower costs
- Direction that could lead to a basic Decision Support System (DSS) for Wyoming
- Information that is usable and up-to-date

Contact:

Wyoming Water Development Office

307-777-7626

Jodee Pring

jodee.pring@wyo.gov

