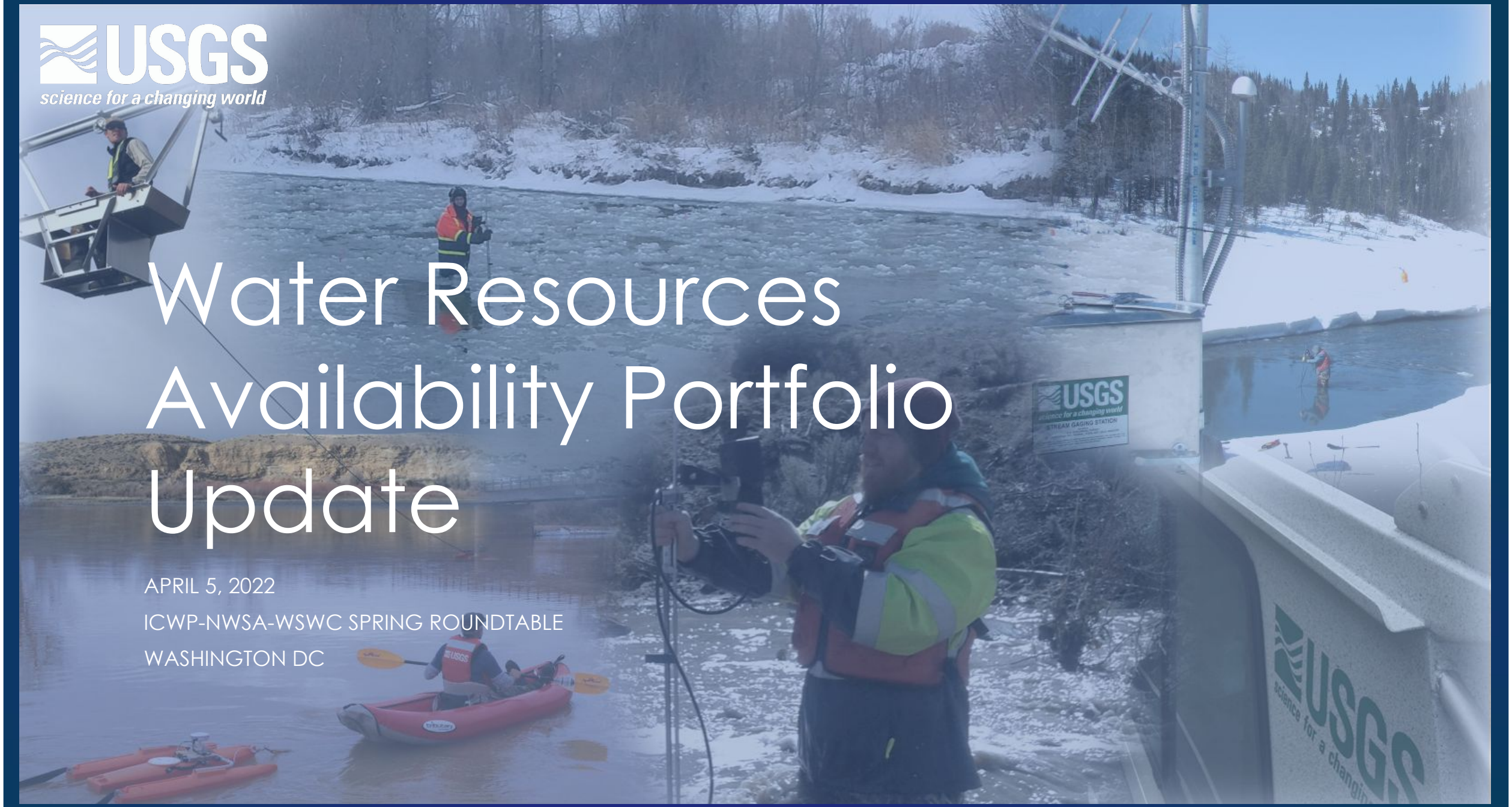


Water Resources Availability Portfolio Update

APRIL 5, 2022

ICWP-NWSA-WSWC SPRING ROUNDTABLE

WASHINGTON DC

SECURE Water Act of 2009 Section 9508

Program Elements – National Water Census

Water Use

- Maintain a comprehensive national inventory
- Incorporate water use science with emphasis on applied research and statistical estimation in assessment of water use
- Integrate State datasets
- Integrate water use, flow, and quality to evaluate the impact of human activity on water and ecological resources

Water Availability

- Develop nationally consistent indicators of availability for both surface and groundwater resources
- Maintain national database of availability
- Develop and apply predictive modeling tools that integrate groundwater, surface water, and ecological systems
- Describe significant brackish aquifers in the US, including quality and use; identify data gaps required to fully characterize brackish resources

USGS

Improving Water Availability Assessments and Forecasting

Improve Water Availability Information Delivery

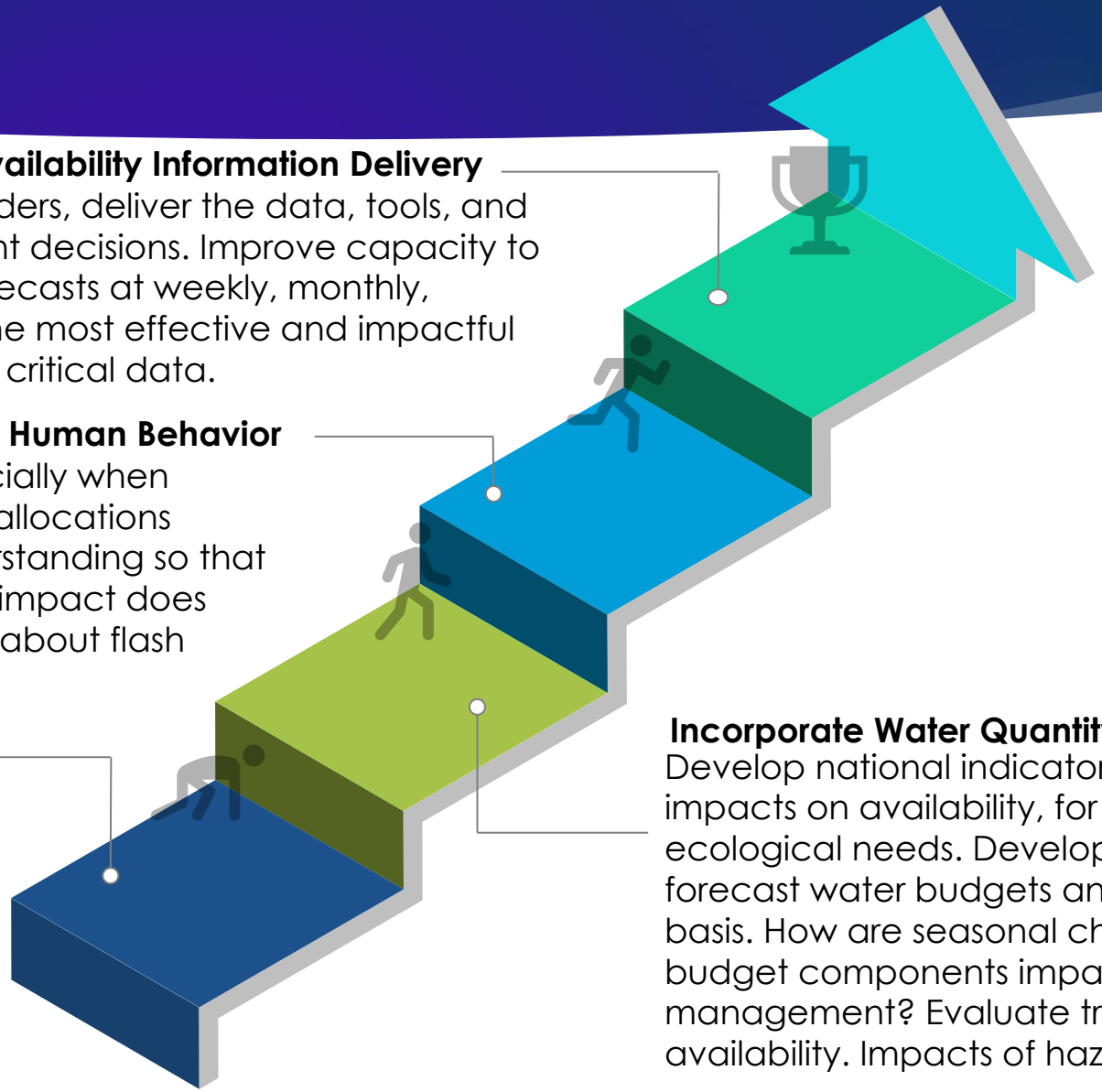
Working with regional and National stakeholders, deliver the data, tools, and information they need to make management decisions. Improve capacity to understand daily availability and provide forecasts at weekly, monthly, seasonal, and decadal time steps. What is the most effective and impactful way to deliver this information so it becomes critical data.

Incorporating Climate and Human Behavior

How do socioeconomics impact availability, especially when supplies do not meet demand? How are resource allocations made? Can we improve hydrologic drought understanding so that we can forecast onset and predict severity? What impact does drought have on water quality and habitat? What about flash droughts and economic impacts?

Improve Water Use Reporting

By 2022, USGS will report daily water use estimates for 90% of the total water use in the Nation, goal is to report 100% through models. Five-year reporting will focus on water availability and trends in factors that impact availability, such as water use.

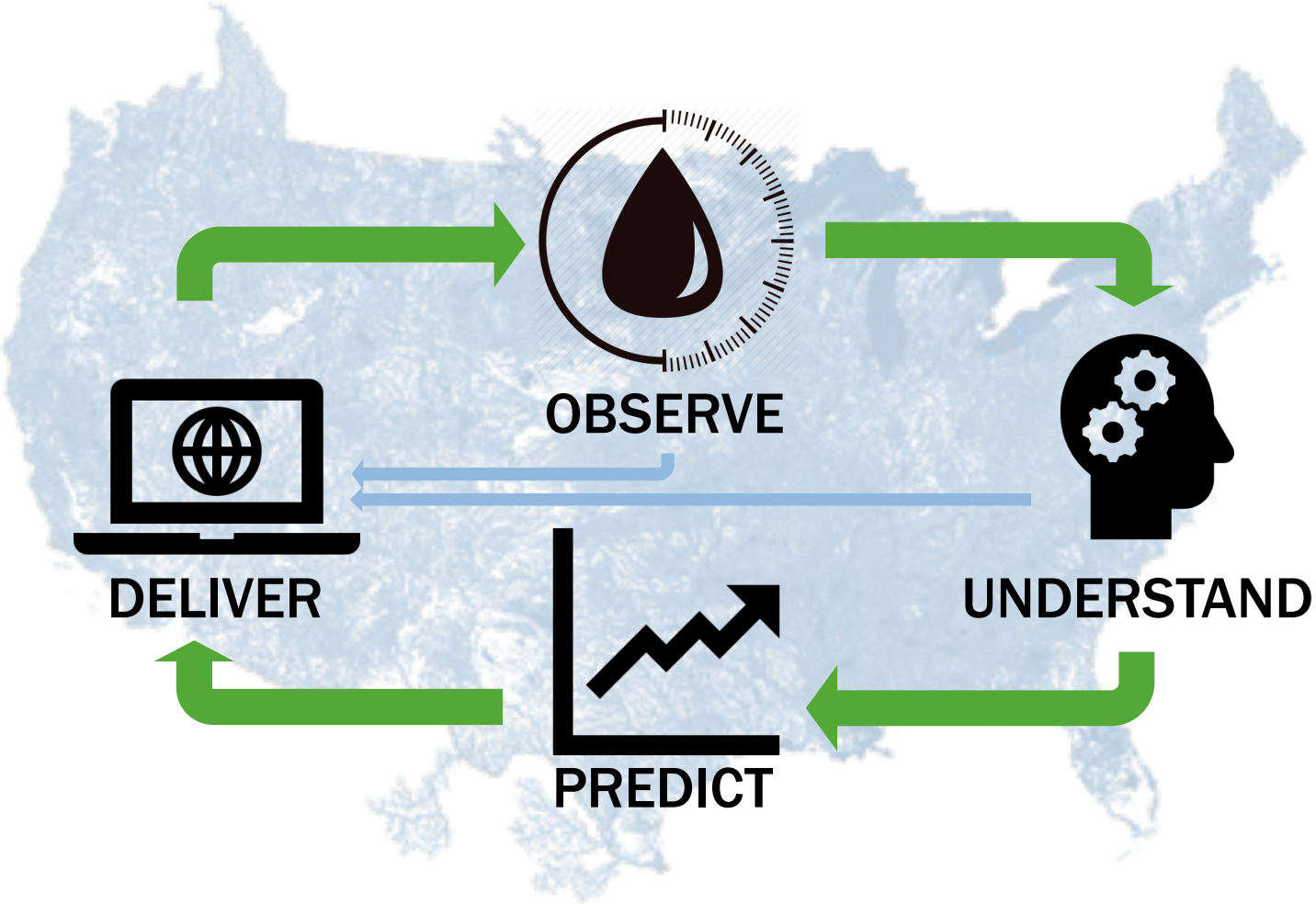


Incorporate Water Quantity and Quality

Develop national indicators of water quality impacts on availability, for both human and ecological needs. Develop models that forecast water budgets and quality on daily basis. How are seasonal changes in water budget components impacting reservoir management? Evaluate trends in water availability. Impacts of hazards?

USGS

Integrated Water Science Process



USGS

Where are we currently doing the work?

- Water Availability Assessment and focal research in IWS Basins
- Rotating limited IWAAs studies using CMF
  - IWS Basins in years 3-5
  - Other focal topics nationally
- Focused IWAAs topics to expand data sets and assessment capacity
- Expansion of data collection capacities for core components

FY22 WMA Appropriations

Program (dollars in thousands)	**2021 Enacted**	**2022 Presidents Budget**	**2022 PB Change From Enacted**	**2022 House Mark**	**2022 Senate Mark**	**2022 Enacted**	**2022 Change From 2021 Enacted**
WAUSP	57,987	69,501	+11,514	68,501	69,501	64,501	6,514
GWISP	100,673	112,651	+11,978	112,651	118,151	110,651	9,978
NWQP	93,460	95,242	+1,782	97242	95,242	96,742	3,282
WRRA	11,000	11,000	+0	15,000	15,000	14,000	3,000
Total	263,120	288,394	+25,274	293,394	297,894	285,894	22,774
CMF	64,529	64,529	+0	65,529	64,529	65,529	1,000

FY22 WRAP Specific Increases

Water Availability and Use Science Program

- Bottled Water Assessment - $1,750,000 (*+$0.75M*)
- OpenET - $1,500,000 (*+$1M)*
- Water Prediction - $13,500,000 (*+$4M*)
- Mississippi Alluvial Plain Assessment Project - $2,000,000 (*-$4M)*
- IWAAs - $3,725,000 (*+$1.25M*)
- Saline Lakes of the Great Basin - $1,250,000 (*new in FY22*)
- Hydrological Science Talent Pipeline - $2,000,000 (*new in FY22*)

National Water Quality Program

- HABs - $6,490,000 (*+$1M, directed CMF*)

Contact Information

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USGS