

Water Resources Mission

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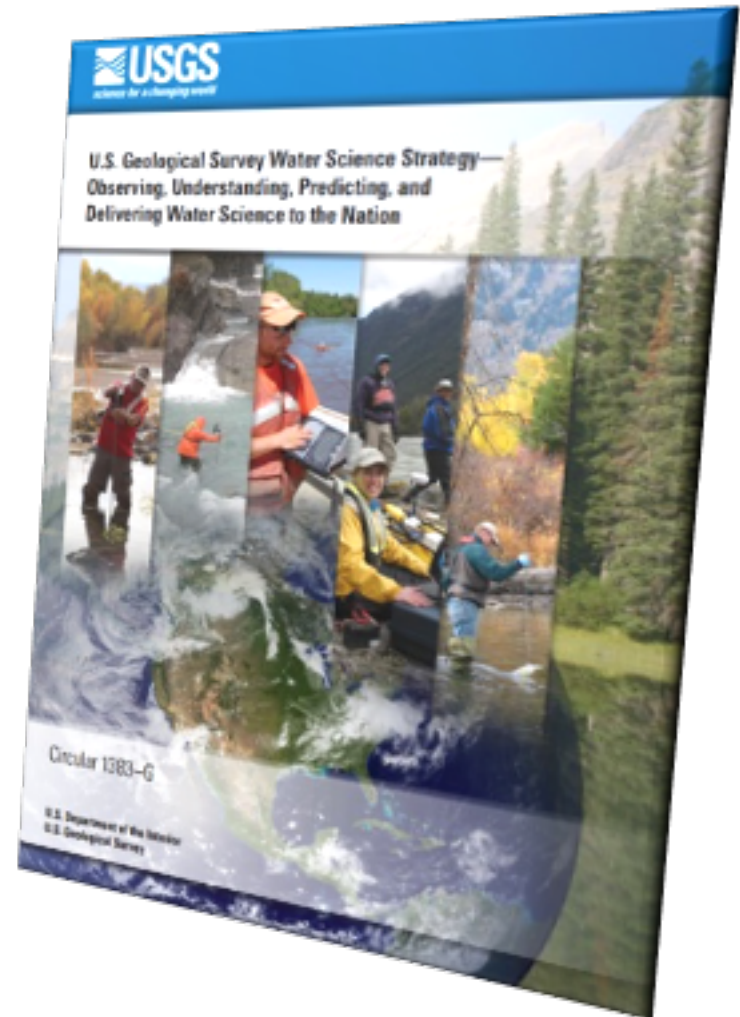
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Observing, Understanding, Predicting, and Delivering Water Science to the Nation

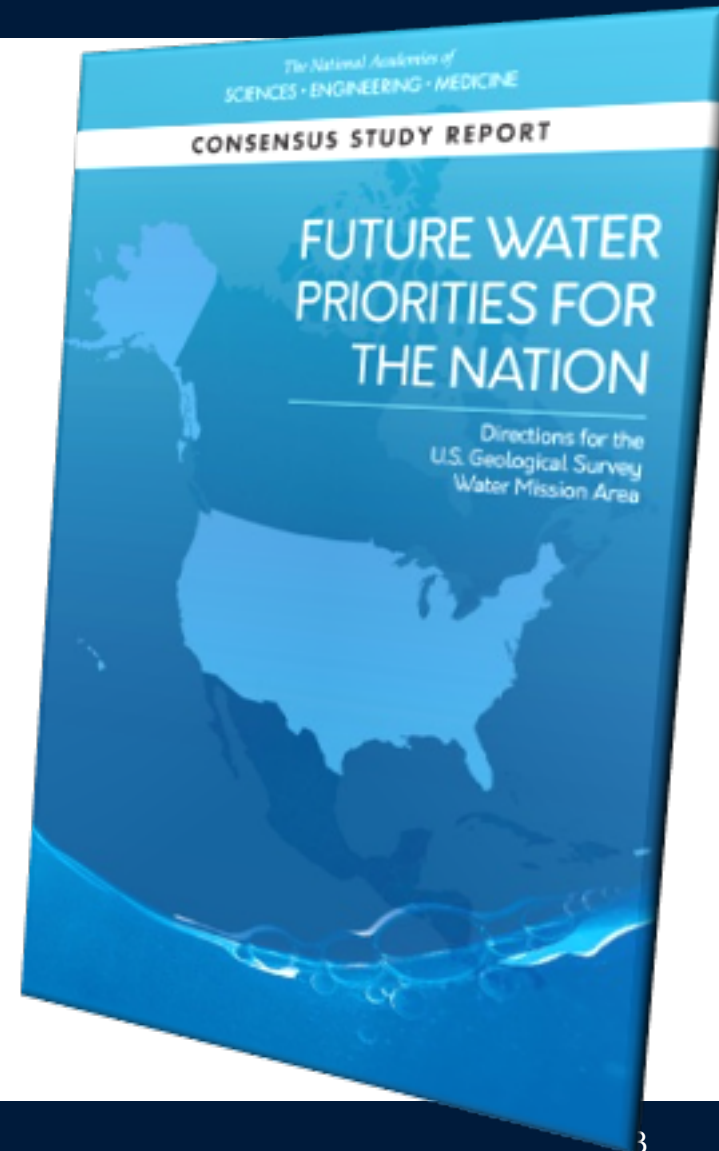
Water Science Strategy: Five Goals

1. Provide society the information it needs regarding the amount and quality of water in all components of the water cycle at high temporal and spatial resolution, nationwide.
2. Advance understanding of processes that determine water availability.
3. Predict changes in the quantity and quality of water resources in response to changing climate, population, land-use, and management scenarios.
4. Anticipate and respond to water-related emergencies and conflicts.
5. Deliver timely hydrologic data, analyses, and decision-support tools seamlessly across the Nation to support water-resource decisions.

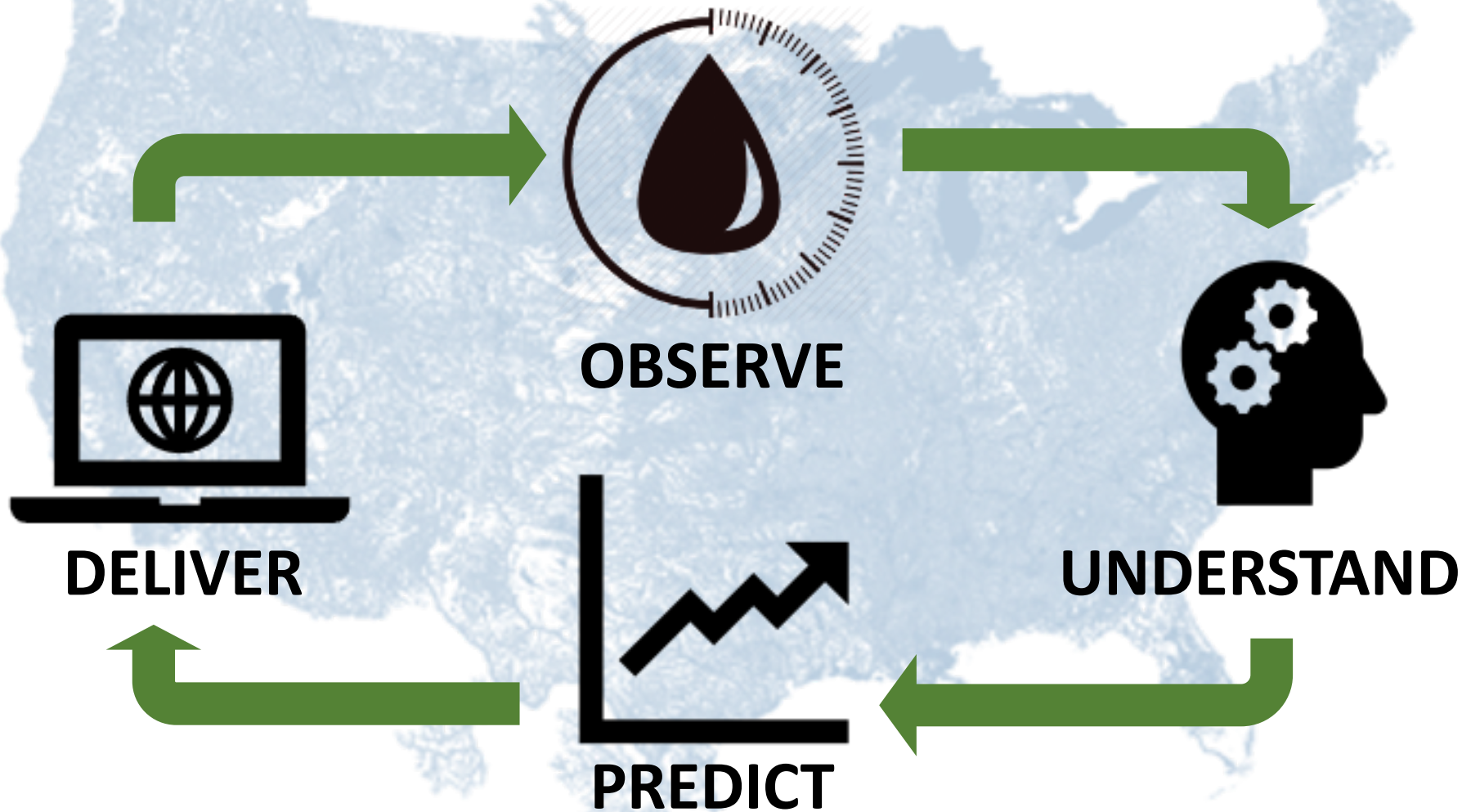


National Academies of Sciences Recommendations for USGS Water Mission

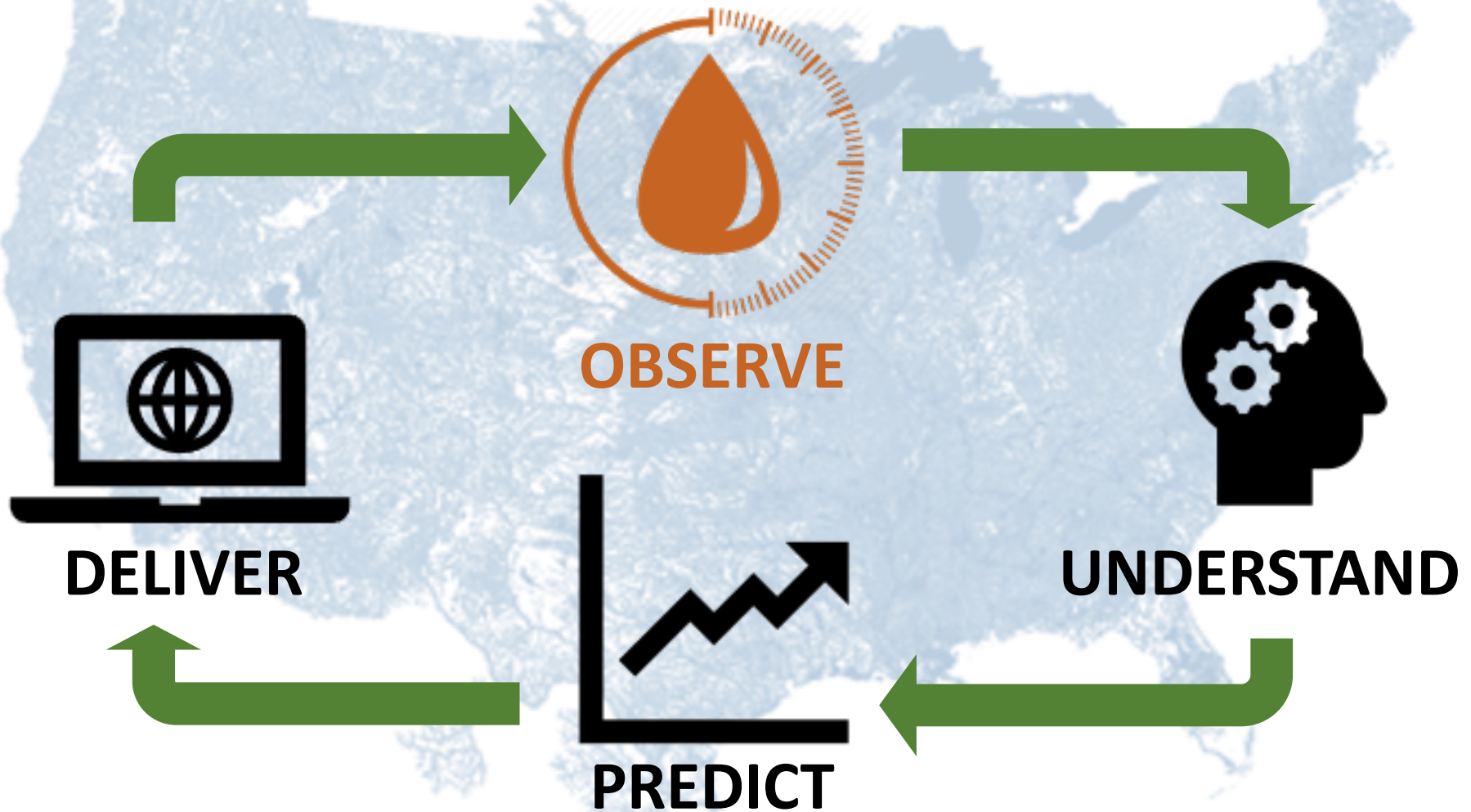
1. Enhance data collection.
2. Coordinate on data delivery.
3. Increase focus on relationships between human activities and water.
4. Develop a robust water accounting system.
5. Collaborate on water use data standards.
6. Ensure monitoring networks are adequate to assess changing conditions.
7. Focus on long-term prediction and risk assessment of extreme water conditions.
8. Develop multi-scale, integrated, dynamic models that encompass the full water cycle.
9. Collaborate within and outside of USGS.
10. Build a workforce ready to take on new water challenges.



The Science Process



The Science Process



Water Observation Gap Limits Understanding, Prediction and Delivery

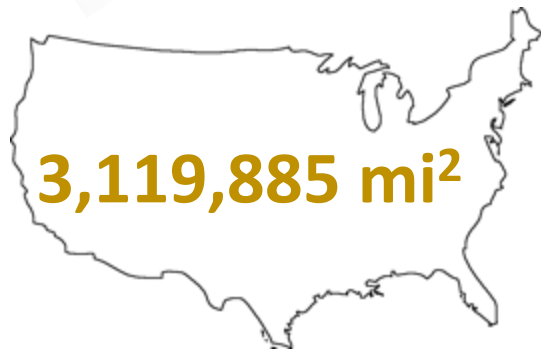


Number of Stream Reaches in
Continental U.S. (CONUS)

8,400



Number of USGS CONUS Streamgages



Area of CONUS

Average Area per Stream Reach  0.1 mi²

Average Area per USGS Streamgage  371.4 mi²