

# TABLE OF QUESTIONS

---

Foreword  
**vi**

---

Preface  
**viii**

---

Postscript  
**168**

---

Acknowledgments  
**170**

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Image Credits  
**173**

## 01

### What Is the Geographic Approach to Water?

The geographic approach to water data and forecasting translates data into maps and supports better decisions in response to floods and droughts. It also provides a geospatial framework for connecting severe weather, such as a hurricane, to local-scale impacts, such as flooding of a road or a house.

**01**

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## 05

### What Is Geocollaboration?

Geocollaboration is the process of sharing geospatial data and overlaying web maps to support discussion and decision-making in a region. This includes flood emergency response, when residents threatened by flooding need to be evacuated.

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## 06

### What Is Geoanalysis?

Geoanalysis builds the geospatial framework by which movement of water can be connected with the people impacted by it—for example, connecting a regional storm with flooding at a particular house.

**101**

# 02

## What Is Geodata?

Geodata describes the water environment, including the shape of the land surface and its drainage through a stream network. Geodata also describes the properties of water itself, such as its flow rate, water depth, and water quality.

23

# 03

## What Is Geovisualization?

Geovisualization transforms data into maps that illustrate water movement through the landscape, a dynamic process that is continually evolving through time. These dynamic maps augment traditional water data visualization, which has been using time charts at particular points in space.

51

# 04

## What Is Geocommunication?

Geocommunication transmits the maps through the web to those who need them. This may be enhanced using apps and ArcGIS StoryMaps™ to interpret the map information. Getting information quickly into the hands of those at risk can be lifesaving.

69

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# 07

## What Is Geoaccounting?

Geoaccounting tracks how much water is in each part of the environment. It balances incoming precipitation with outgoing evaporation, infiltration into soil, and surface runoff to streams. It enables comparison of available water supply with water demands.

121

# 08

## What Is GeoAI?

GeoAI is the process of using machine learning to create large-scale analyses of the water environment and its properties. It supports complex queries to provide interpreted information in an intuitive way.

145

# 09

## What Is Geodesign?

Geodesign is the process of examining alternative plans for developing an area of the landscape and understanding the impact those plans have on water movement through that area.

157