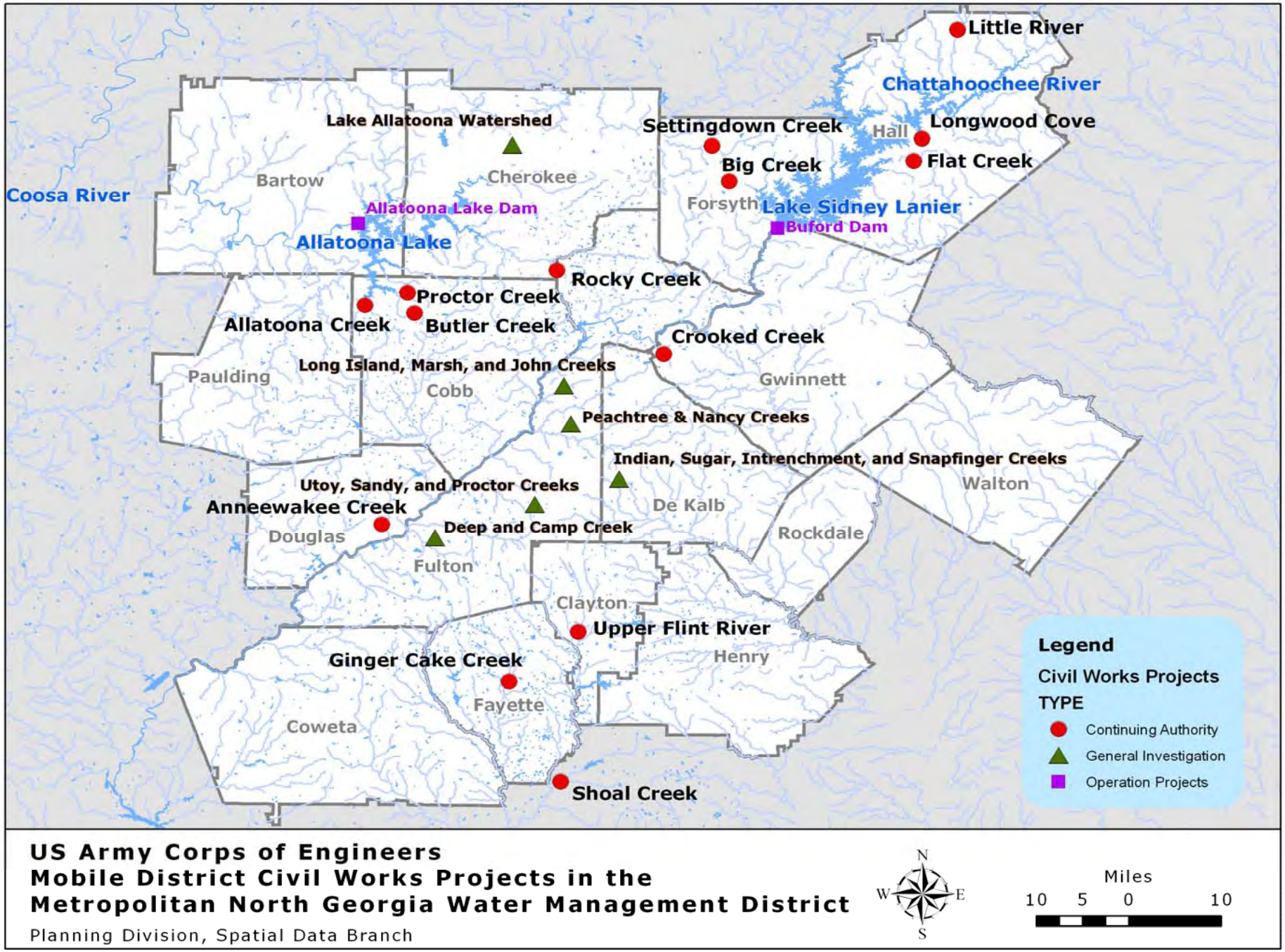

COLLABORATION,
COORDINATION,
AND COMMUNICATION
ON A REGIONAL LEVEL
The North Georgia Teams




**US Army Corps of Engineers**
**Mobile District Civil Works Projects in the**
**Metropolitan North Georgia Water Management District**

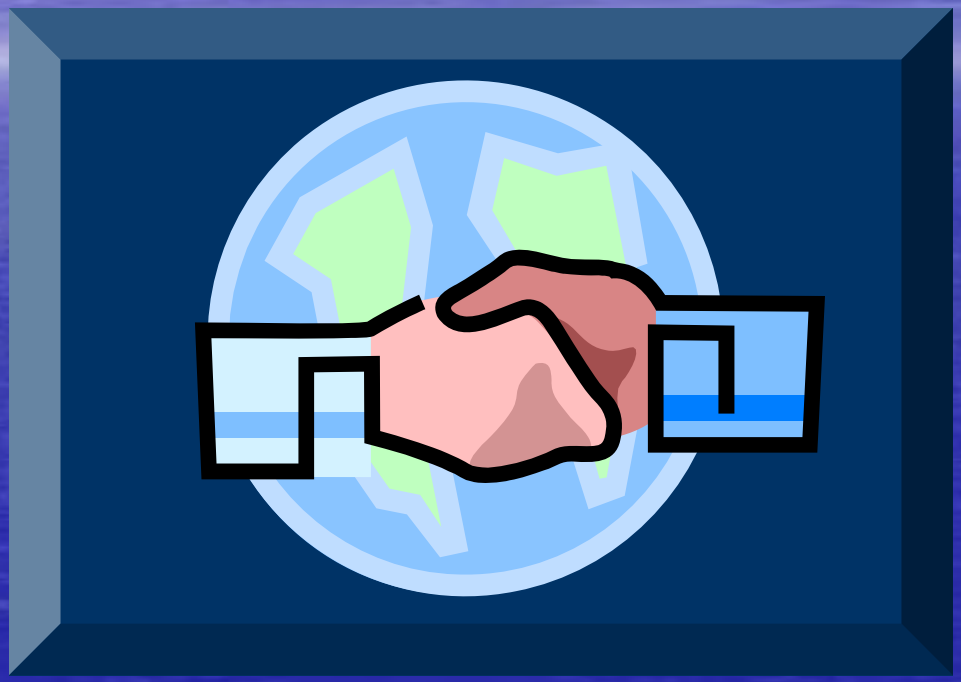
Planning Division, Spatial Data Branch

# Troubled Waters

- Common Setting
  - **Heavily urbanized**
  - **Same eco-region**
- Common Problems
  - **Flash flows**
  - **Sediment accumulation**
  - **Streambank erosion**
  - **Channel deepening**
  - **Habitat loss**
  - **Impaired water quality**

Need for a programmatic approach

Formation of North Georgia Watershed Team



Need for a collaborative effort

Development of the North Georgia Water Resource Alliance

# Strategy

- Form a regionalized Corps study team
  - **Identify efficiencies and common constraints**
  - **Identify stakeholders on a regional scale**
  - **Develop a collaborative process**
  - **Engage stakeholders as partners**
  - **Develop a consistent communication network**
  - **Streamline coordination with limited resources**

# NGWT Goals

- Provide consistent coordination and guidance concerning policy and procedures as applicable to the North Georgia region
- Develop successful projects in the region through deliberate collaborative planning
- Develop trust and foster long lasting relationships with sponsors, resource agencies, and stakeholders

# Action Taken

- Invited all water resource related agencies, state and federal, to attend a workshop with the Corps and project Sponsors
- Established the North Georgia Water Resource Alliance (NGWRA)
- Held a total of four workshops over the past year (Workshop V – June 28)


State Soil and
Water Conservation
Districts of Georgia
National Ecosystem Planning
Center of Expertise
U.S.
FISH & WILDLIFE
SERVICE
DEPARTMENT OF THE INTERIOR
NGWRA
WILDLIFE RESOURCES
DIVISION
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science for a changing world
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1822
FULTON COUNTY

# NGWRA Goals

- **Leverage limited resources**
- **Initiate early coordination**
- **Improve communication**
- **Support the collaborative planning process**
- **Focus efforts to develop and implement sound project solutions**

# NGWRA Initial Objectives

- Determine parameters important to ecosystem restoration in streams
- Develop a regional model to quantify current and future stream health
- Develop a Memorandum of Understanding to demonstrate commitment of the working group
- Develop a regional monitoring plan for stream restoration projects
- Cross educate team members in agency policies and streamline processes

# In-stream Ecosystem Response Model

- Parameters
  - **Physical, biological, and chemical**
- Inputs
  - **IBI scores (fish and bugs)**
  - **Water quality assessment**
  - **Visual habitat assessment**
  - **H&H modeling**
- Output
  - **Ecological benefits**

# In-stream Ecosystem Response Model

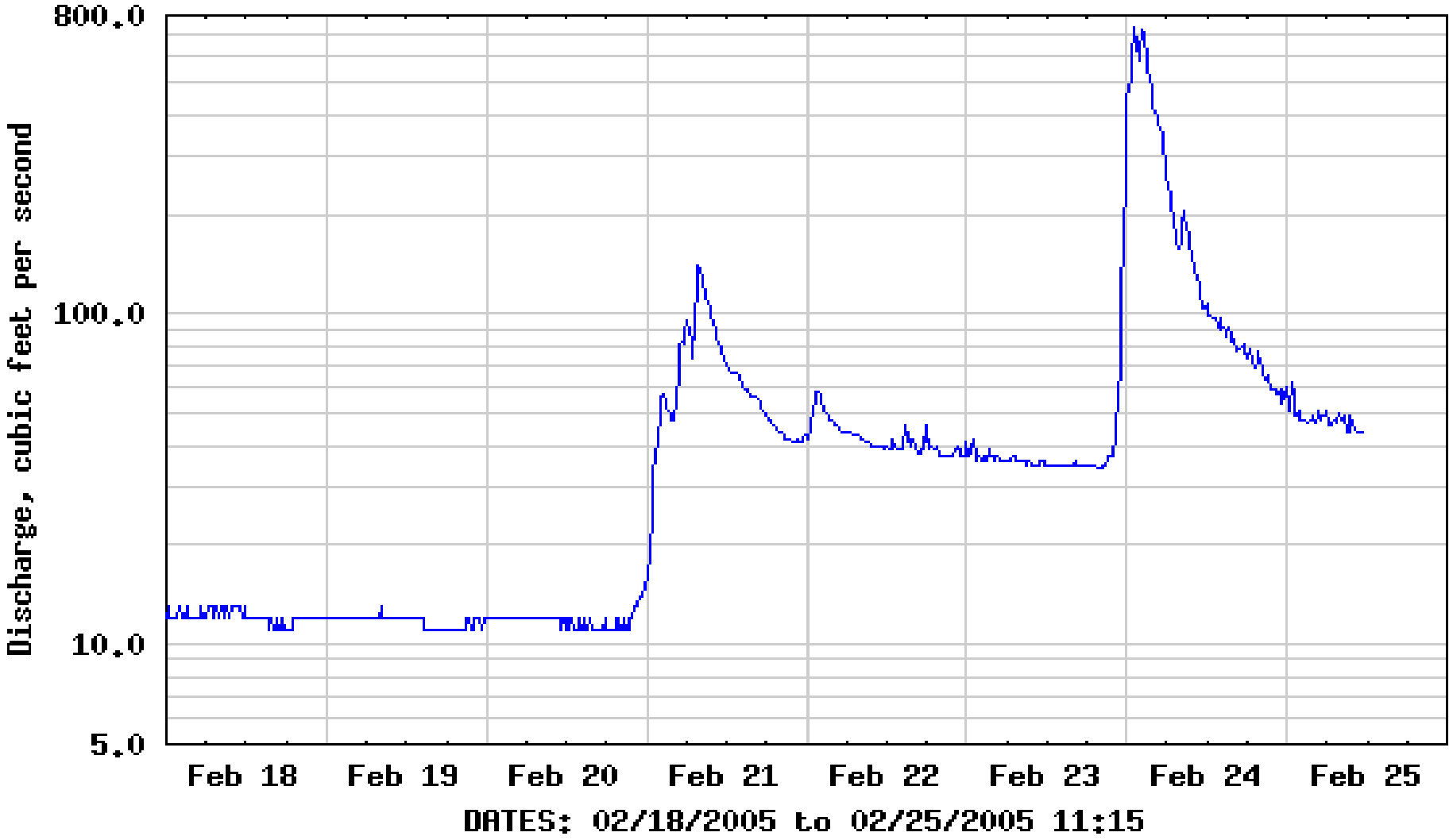
- Various input scores are weighted and combined into a “stream health score”
- Use results of H&H modeling and best professional judgment to predict future without and future with project “stream health scores”
- Difference between future without and future with project scores represents the ecosystem response for various project alternatives

# Future NGWRA Study Needs

- **Reference stream hydrographs**
  - **Based on ecoregion/sub-ecoregion**
  - **Variable drainage areas**
- **Habitat assessment**
  - **Based on ecoregion/sub-ecoregion**
  - **Current protocol too subjective**

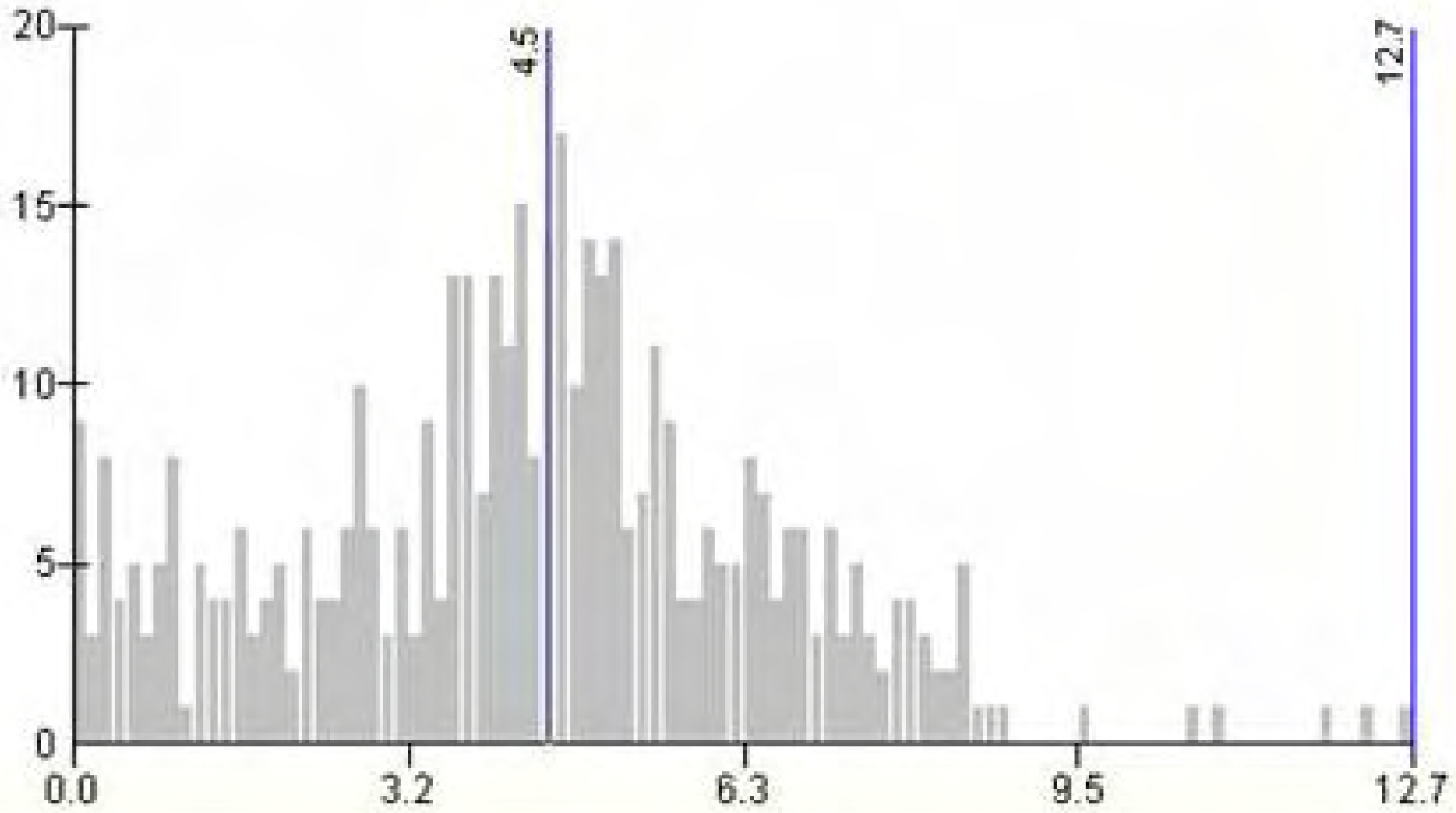
USGS

# USGS 02203700 INTRENCHMENT CREEK NEAR ATLANTA, GA




Provisional Data Subject to Revision

# Two Year Frequency Flow Velocities




**Velocities (fps) on X axis, Number of occurrences on Y axis**

# Visual Habitat Assessment

- Current regional assessment protocol developed by GaDNR
- Records the physical condition of the stream, placing emphasis on the most biologically significant variables such as instream physical characteristics, channel morphology, riparian vegetation, bank structure, and water appearance
- The assessment provides a baseline score or quantitative estimate of the stream habitat conditions for evaluation and comparison to a reference reach

# Questions ?