## 404(b)(1) Effect Determinations

**Fall 2010 Consultant Workshop** 





# PART V - PROHIBITIONS AND SIGNIFICANT DEGRADATION

- Activities permitted under Section 404 of the Clean Water Act must not result in violations of other environmental laws or in significant degradation that would have significant adverse effects on the aquatic system or human environment.
- Findings of significant degradation rely on factual determinations, evaluations and tests.



## **Factual Determination Findings**

- No Effect
- Negligible Effect
- Short Term Minor Effect
- Long Term Minor Effect
- Major Effect (Significant)









# Subpart C - Potential Effects on Physical and Chemical Characteristics of the Aquatic Ecosystem

- Substrate
- Suspended Particulates/Turbidity
- Water
- Currents Patterns & Water Circulation
- Normal Water Fluctuations
- Salinity Gradients





How would your project impact this??



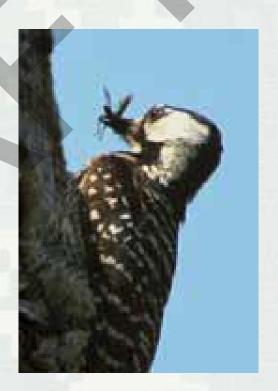
# Subpart D - Potential Effects on Biological Characteristics of the Aquatic Ecosystem

- Threatened or Endangered Species
- Fish, Crustaceans, Mollusks, and Other Aquatic Organisms in the Food Web
- Other Wildlife



## **Endangered Species**







# **Mat-Forming Quilwort**





#### Michaux's Sumac





#### **Green Sea Turtle**





### **Cherokee Darter**





## Subpart E - Potential Effects on Special Aquatic Sites

- Sanctuaries and Refuges
- Wetlands
- Mud Flats
- Vegetated Shallows
- Coral Reefs
- Riffle and Pool Complexes





# **Bond Swamp**





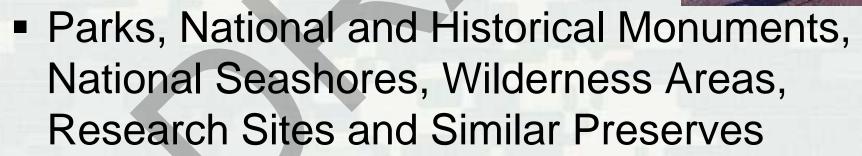
# **Riffle and Pool Complexes**





#### **Subpart F - Potential Effects on Human Use Characteristics**

- Municipal and Private Water Supplies
- Recreational and Commercial Fisheries
- Water-related Recreation
- Aesthetics



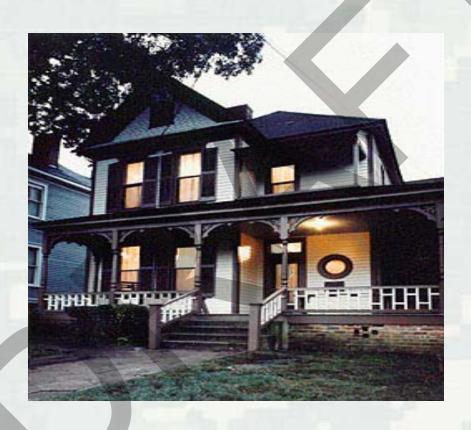


# Kennesaw Mountain National Battlefield Park





#### **National Historic Monument**





### Subpart G - Evaluation and Testing

 General Evaluation of Dredged or Fill Material – Is there a reason to believe that the discharge site or fill material would be contaminated?



Chemical, Biological, and Physical Evaluation and Testing – If there is a reason to believe that contaminants are present, what chemical testing is necessary?

# Part VI - Subpart H - Actions to Minimize Adverse Effects

- Actions concerning the location of the discharge
- Actions concerning the material to be discharged
- Actions controlling the material after discharge
- Actions affecting the method of dispersion
- Actions related to technology
- Actions affecting plant and animal populations
- Actions affecting human use
- Other Actions
- Discussion





#### Part VIII & Part VIII

- Determination of Cumulative Effects on the Aquatic Ecosystem
  - ► A complete assessment of past, present and reasonably foreseeable future cumulative impacts is conducted as part of the preparation of the environmental assessment (EA) for each Individual Permit application
- Determination of Secondary Effects on the Aquatic Ecosystem
  - ► Secondary effects of the proposed project are also considered in the EA

#### **Part IX**

#### Findings

- ► Status of other authorizations and legal requirements
- ► Evaluation of Compliance with 404(b)(1) Guidelines



Cultural Resources

► Findings of Compliance or Non-Compliance with Restrictions on Discharge



#### Part X

- Summary and Conclusion
  - ► LEDPA
    - Discharge does not cause or contribute to violation of applicable state WQ standards, toxic effluent standards, T & E, or any marine sanctuary
    - Discharge does not cause or contribute to significant degradation of WOUS
    - All steps taken to minimize adverse impacts to the aquatic ecosystem
    - Discharge, with all permit conditions complies with the 404 (b)(1) Guidelines

