



Wild and Scenic Rivers Transportation Infrastructure Projects: A Case Study of the Wekiva River

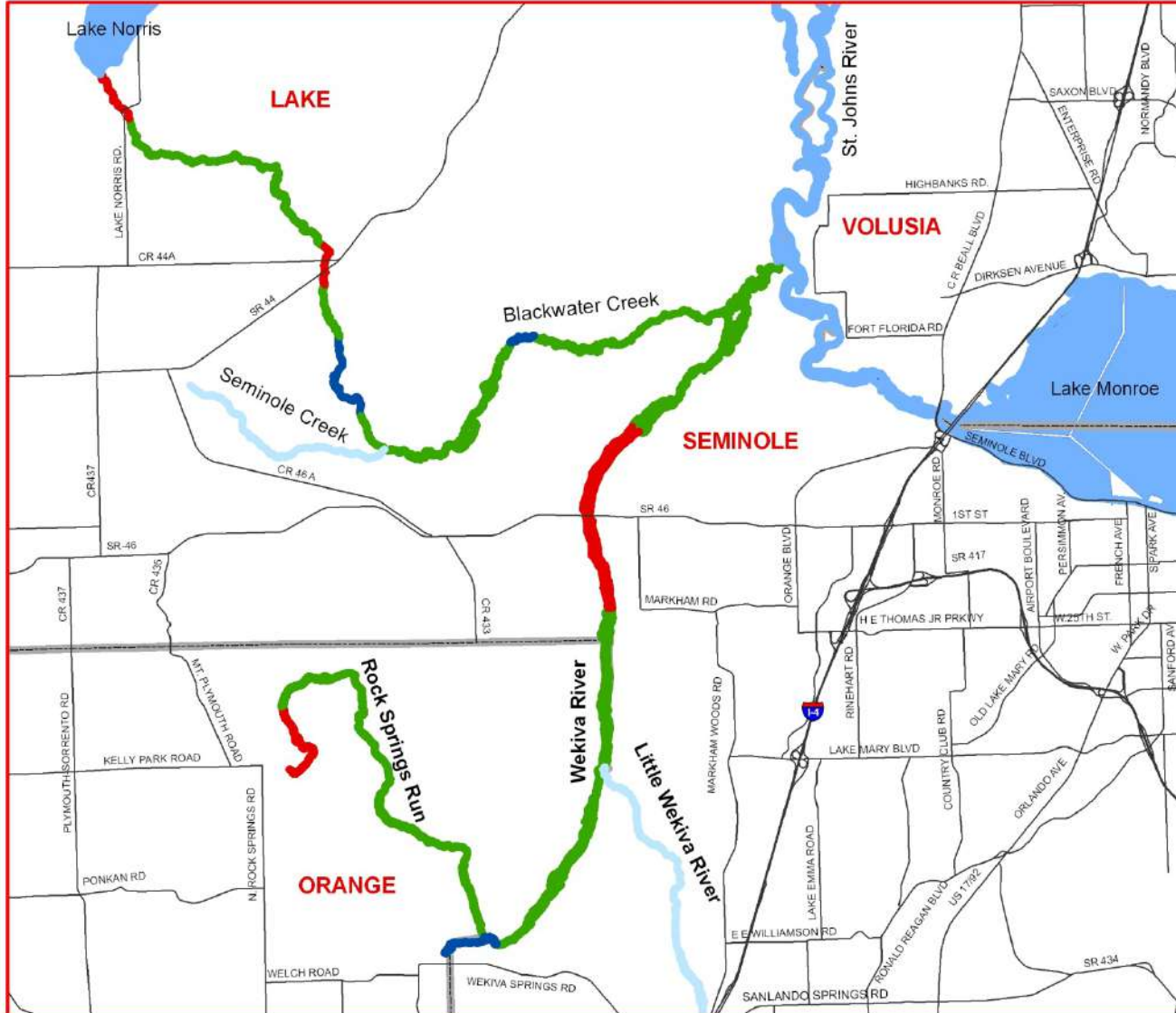
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Wekiva Partnership Wild and Scenic River



Map 1: Wekiva Wild and Scenic River System



- Major Roads
- Not in Wild and Scenic System
- Recreational Segment
- Scenic Segment
- Wild Segment
- County Boundaries
- Surface Waters

Data Sources: Florida Geographic Data Library, Florida Department of Environmental Protection



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Partnership on the Wekiva...

- Designated October 13, 2000 as a “Partnership” Wild and Scenic River
- NPS cannot own land
- Responsible for planning, resource protection
- Managed collaboratively by the Wekiva River Advisory Management Committee (AMC)
- NPS solely responsible for Section 7 Determinations
- AMC includes FDEP, St Johns Water Management District, local governments, NGOs, and citizens.



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The Issue at Hand...

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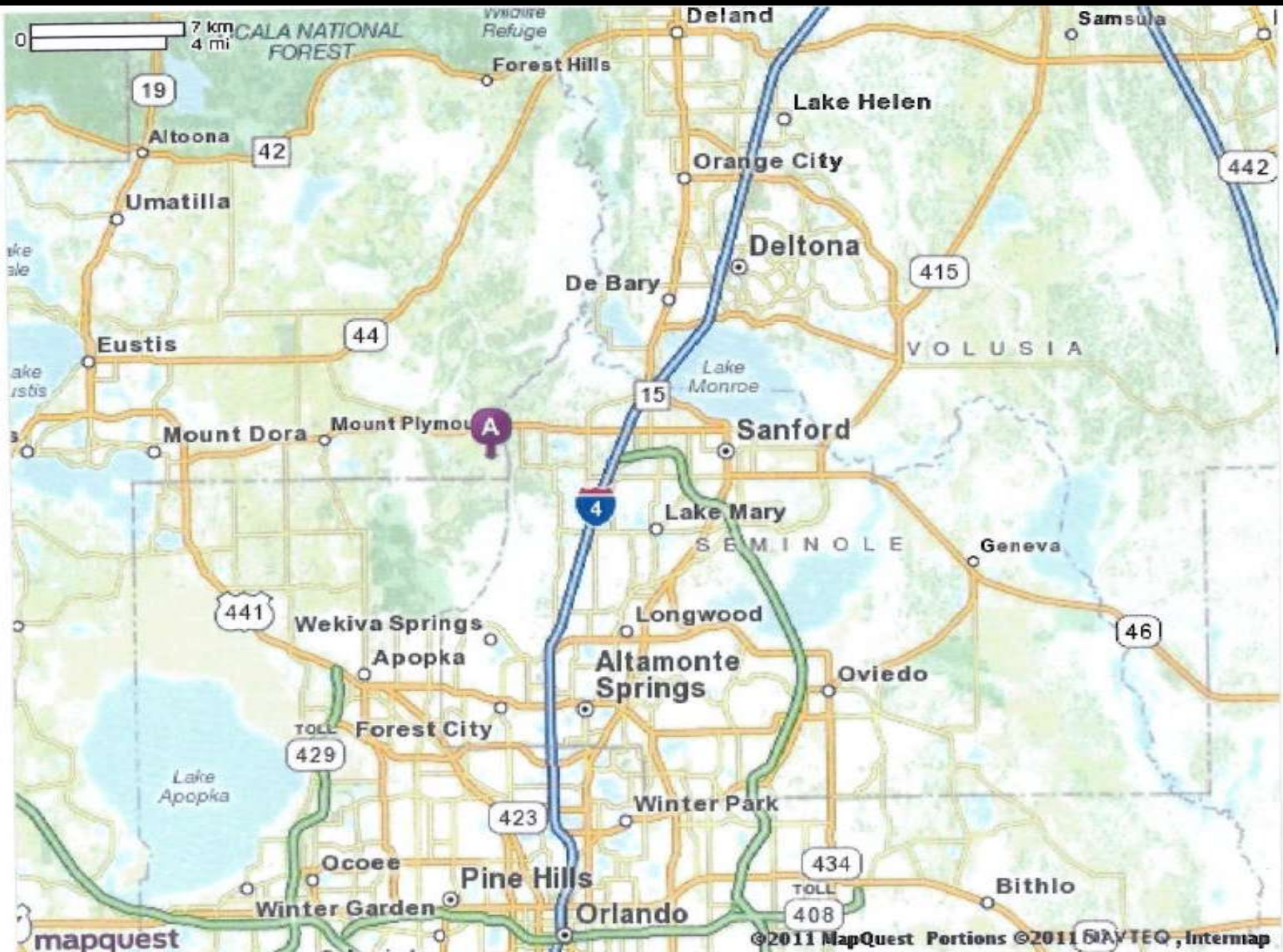
- FDOT and Orlando-Orange County Expressway Authority proposes replacing the existing State Highway 46 bridge with a new span beginning in the late 1990s...



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terior





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Project specifics...

- Authorized in part by the Wekiva Parkway Act
- Estimated to cost \$1.9 billion!
- Discussions began with NPS in 2008
- Construction originally slated to begin summer 2012
- Economically depressed area
- Central Florida's "most dangerous roadway" (Orlando News Sentinel, FDOT)
- Being replaced by a 27 mile parkway, completing Orlando's outer loop
- Crosses a Congressionally designated Wild and Scenic River
- 6-8 lane, high speed, controlled access toll road.

The Federal Nexus...

- **Construction in the bed and banks of a Wild and Scenic River**
- **Federal funding from Federal Highway Administration**
- **Replacing an existing structure with multiple piers in the water**
- **A Section 4(f) resource according to Department of Transportation Act**
- **404 permit required.**

Section 7(a) of the Wild and Scenic Rivers Act

- Prohibits “direct and adverse” effects to the values for which the river was designated
- Protects free flow, water quality, and outstandingly remarkable values (ORVs)
- Wekiva ORVs: Scenery, recreation, fish and wildlife, geology, historic, water quality and quantity
- NPS responsible for determining if direct and adverse.



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The Conundrum...

- FDOT needed funding from FHWA
- FHWA needed Section 4(f) concurrence from NPS
- NPS needed to evaluate project for direct and adverse effects under Section 7(a)
- FDOT could not proceed with bridge design until FHWA releases funds...





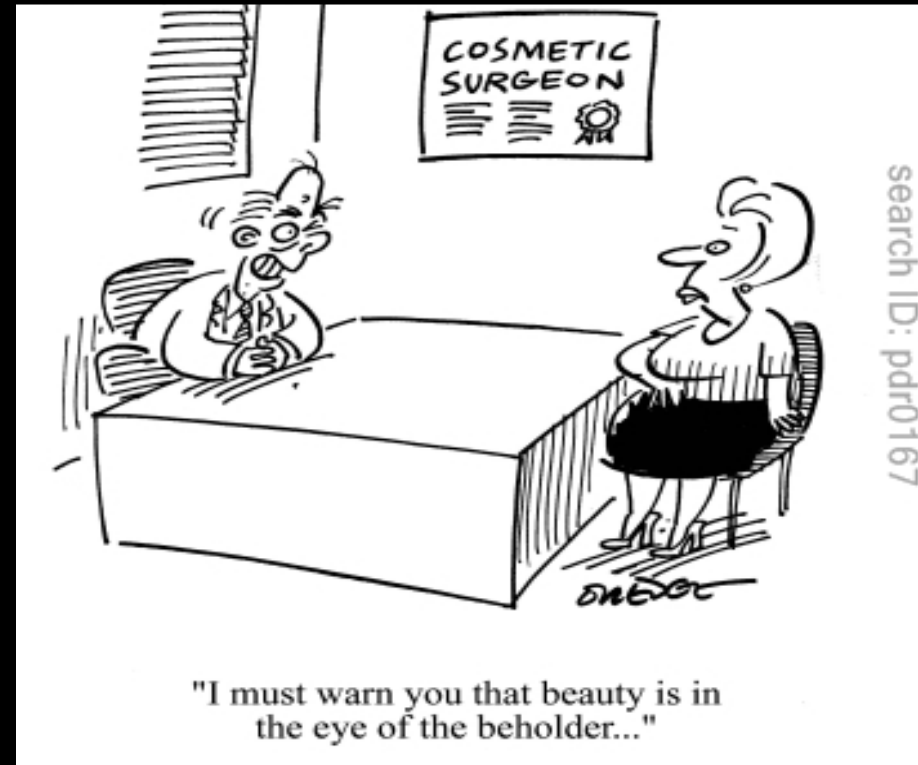
Ask FDOT and OOCEA to hold a design charette...

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Charette...

- Structured as three meetings over three separate days
- Site visit, visual assessment, issues identification
- Design alternatives
- Refinement
- Beauty is in the eye of the beholder

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Designing to Avoid Direct and Adverse Effects on Scenery?

- No NPS policy guidance for evaluating scenic values on WSRs
- BLM's Visual Resource Management (VRM) offers an objective replicable methodology
- Used a contrast rating scale to compare baseline to proposed future conditions
- Goal is to limit or avoid visual contrast with the scenic environment
- Piece of cake!

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Characterize

- Form
- Line
- Color
- Texture

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The Invisible Alternative

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Strutted Segmental Concrete Box Girder, Alternative C Profile



Composite Steel Truss, Alternative C Profile



Segmental Concrete Box Girder, Compromise Alternative



Lessons Learned...

- **Start discussions early in the process**
- **Establish and maintain an administrative record**
- **Get to know the stakeholders and strive to understand their interests**
- **It never hurts to ask!**
- **Recognize you may be a very small player, an obstacle, in a very big project**
- **Understand and respect the interests of the proponents**
- **Appeal to their sense of patriotism, regional heritage and ownership!**
- **Encourage exceptionalism, but be ware of spectacularism**

Did We Succeed???

- Arguably, YES!
- The charrette succeeded in moving discussion along
- No piers in the water!
- Innovative stormwater mitigation to improve water quality
- Alignment moved south to avoid impacts to island and residences
- Wildlife underpasses to facilitate ecological connectivity
- Jointly drafted a Section 7(a) Determination with FDOT
- Continuing to monitor construction
- Stakeholders will determine color tinting

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Did we get all we wanted?



- NO! Compromise due to varying stakeholder interests, baseline
- Key design elements:
 - *No piers in the water*
 - *Bridge height to minimize visual intrusion*
 - *Sound buffers*
 - *Lighting buffers*
 - *Color tinting*
 - *Stormwater optimized*
 - *Alignment shifted slightly*
 - *No longer controversial*



Questions?

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