Strategic Aggregate Study

Transportation Commission
December 5, 2006

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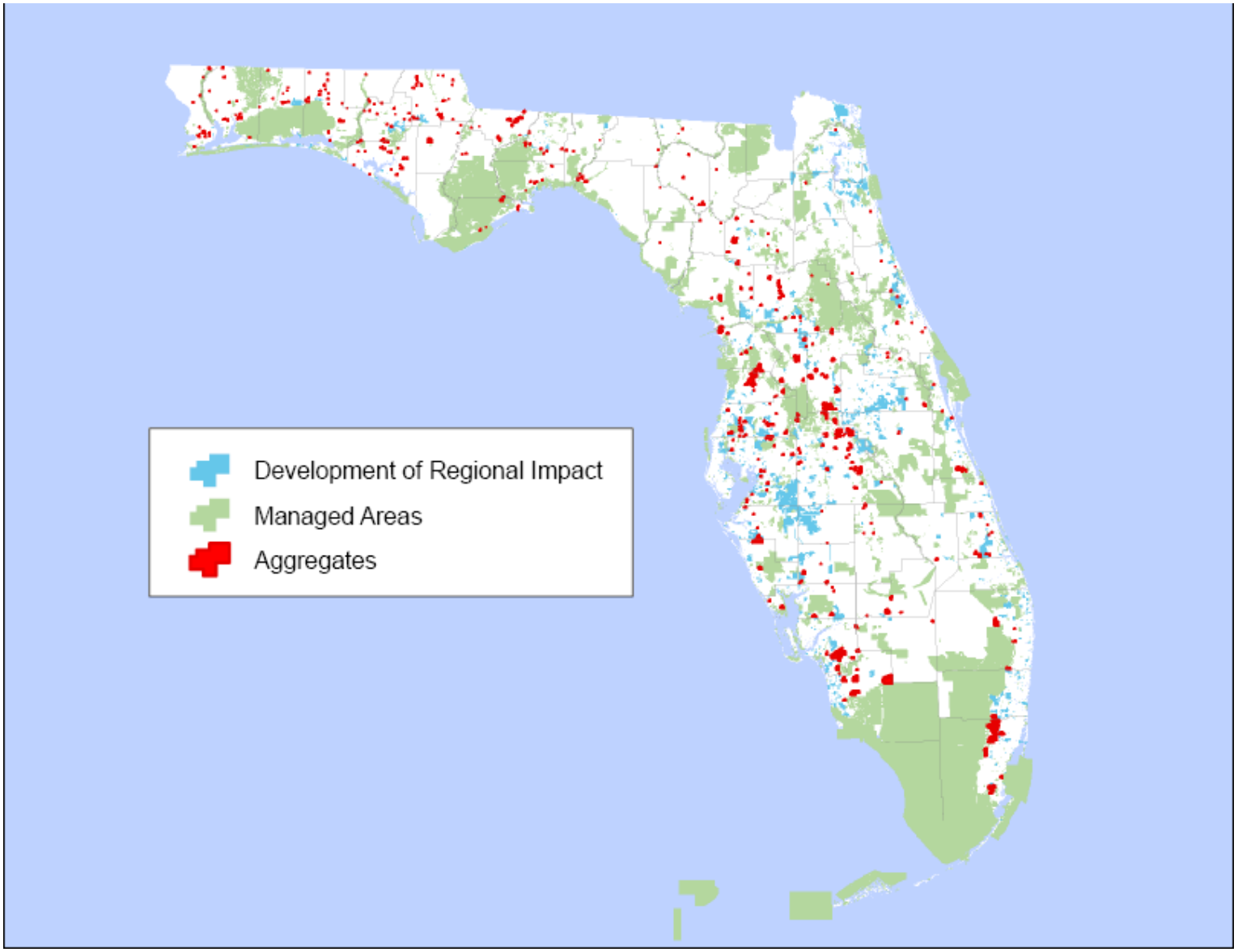
LAMPL HERBERT

"Strategic"

Highly important to or an integral part of a plan ……..

"Aggregates"

Rock and sand mined and processed for construction of roads, bridges, buildings.


Development of Regional Impact
Managed Areas
Aggregates

Aggregates

- 140 million tons used in Florida each year
  - 125 million tons produced in state, 15 million tons imported
  - FDOT as largest single user contracts for about 10% of supply
- FDOT sets the standards for engineering properties of aggregates
- High quality in-state materials come from Miami-Dade area

What is the current problem in Florida?

- Existing mine permits challenged
  - Output from permitted mines still continues
- Difficulty in permitting new mines
- Development impinging on mining
  - One can chose where development occurs but one cannot chose where rock is found.
- Infrastructure for increasing imports not in place
  - Ports
  - Rail

Project Goals

- Demonstrate scope of aggregates issues
- Identify stakeholders and audience
- Identify regulatory and operating conditions
- Plan for change as in-state aggregate sources decline
- Identify mechanisms for change/public investment

Place-based Resource Issues – Phase I

- Where are the rock/aggregate resources (reserves)?
- Where are the existing mines?
- What is the outlook for continued Florida-based mining?
- What are impediments to developing new reserves?
  - Environmental regulations
  - Zoning/land use/future land use
  - Local regulations (noise, blasting, operational hours)
  - Large-scale DRI developments in the vicinity


Lee County
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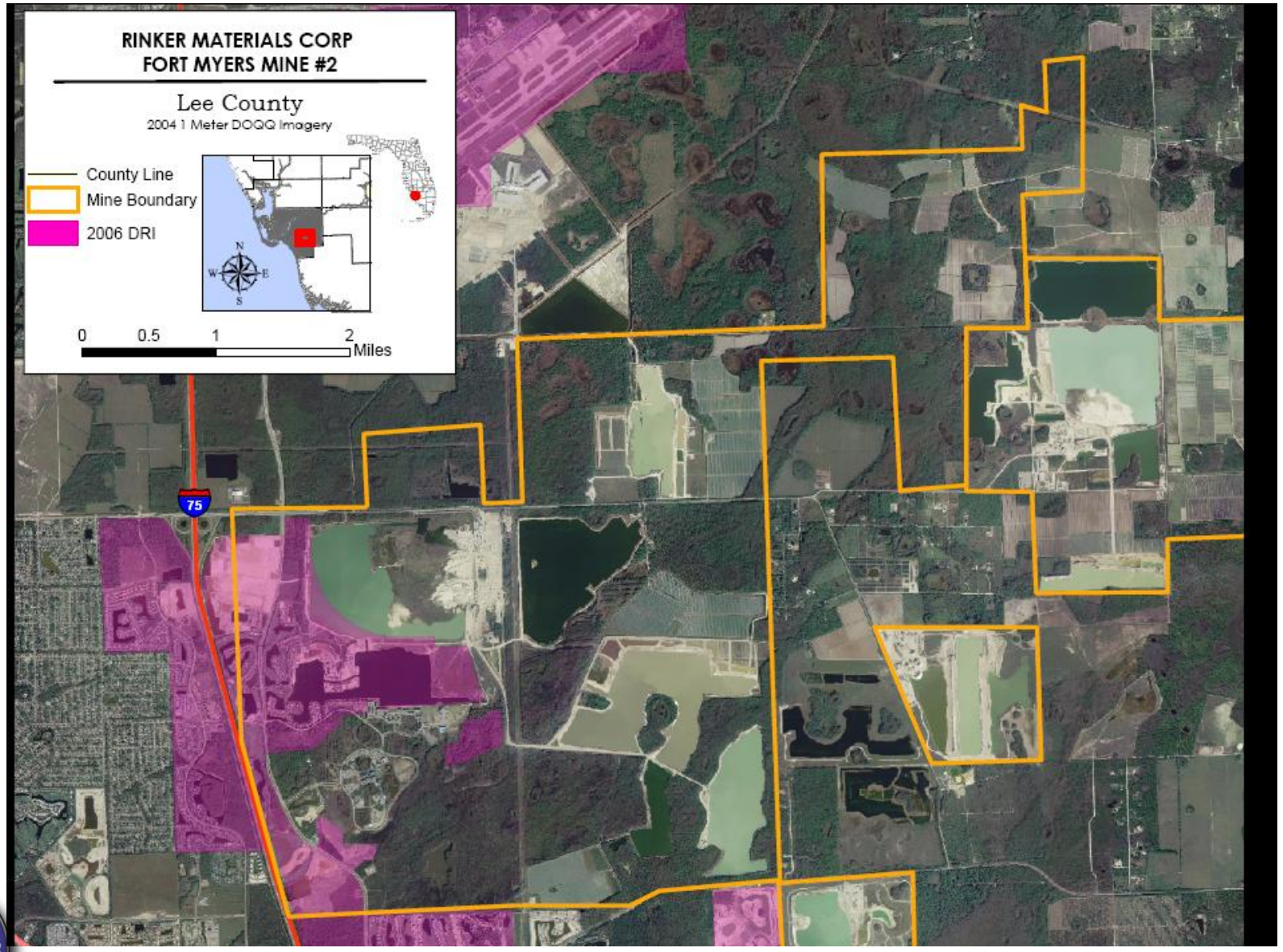
RINKER MATERIALS CORP
FORT MYERS MINE #2
Lee County
2004 1 Meter DOQQ Imagery
County Line
Mine Boundary
2006 DRI
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Miles
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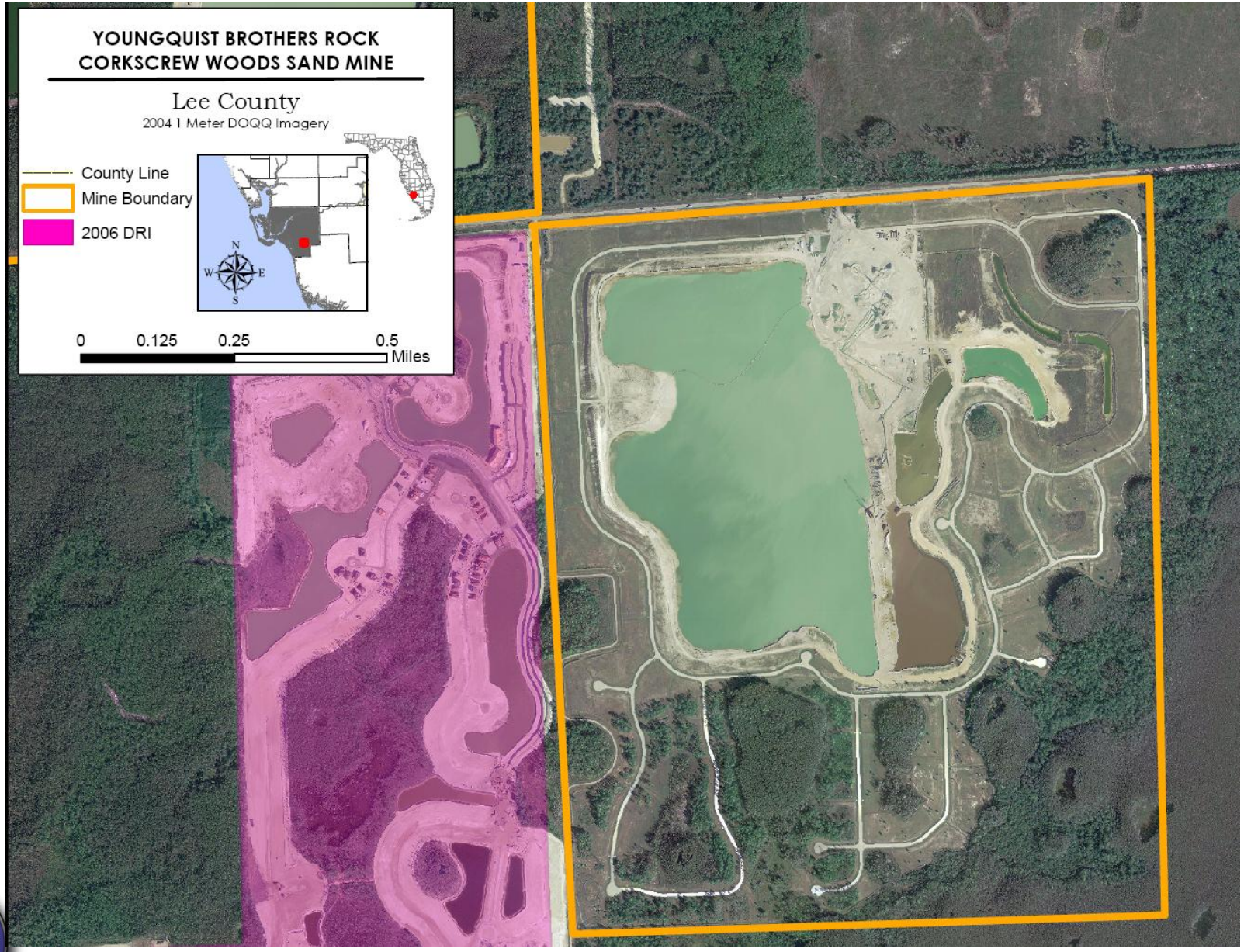
YOUNGQUIST BROTHERS ROCK
CORKSCREW WOODS SAND MINE
Lee County
2004 1 Meter DOQQ Imagery
County Line
Mine Boundary
2006 DRI
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Miles

Economic Modeling – Phase II

- Demonstrate value of aggregate materials to state
- Demonstrate how materials are linked to:
  - Transportation
  - Highway safety
  - Construction / Maintenance
  - Continued economic growth
  - Affordable housing/school construction
- Understand movement of materials into and around Florida
- Document direct/indirect impacts to sectors of economy

Modeling Outcomes

- Forecast aggregate needs in 5-10 year horizon and beyond
- Evaluate transportation aggregate needs
- Project impacts of mine closures/new mine permitting issues
- Identify infrastructure needs for rail / port handling facilities
- Estimate costs to consumers /DOT
- Predict unintended consequences

Preliminary findings for aggregates

- Known in-state aggregate reserves do not appear to be adequate for 5-10 year growth period and beyond
- Regulatory changes needed to mine existing in-state reserves
- Florida dependent on sources from Lake Belt
- Port deliveries may need to be increased 5-10 fold
- Rail infrastructure improvements needed for imports and efficient intra-state distribution of aggregates

Next steps for Strategic Aggregates Study

- Prepare summary of issues for policy review and present findings to all stakeholders
  - Legislature and elected officials
  - Transportation Commission
  - Other State Agencies
- Explore potential remedies and develop an overall strategy
  - Enhancing aggregate reserves
  - Coordinate public investments in port and rail infrastructure
    - Inventory aggregate handling needs and required investment for ports and rail