Putting the Components Together:
Lessons Learned in Designing the Northern Everglades PES Program

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Launched in Jan 2011: the Northern Everglades PES Program

The Buyer – South Florida Water Management District (SFWMD)
The Seller – eligible Cattle ranchers

• First Solicitation - 2011
  – SFWMD and ranchers enter into 10 year contracts for water or nutrient load reduction services
  – 14 proposals submitted/8 projects selected providing 4,800 ac-ft/yr retention
  – Contract obligation of $7M over 10 yr life of contract
  – Price per ac-ft ranged from $99 to $158

• Preparing for 2nd solicitation Spring 2012
Northern Everglades and estuaries are plagued with water quality/quantity problems, land conversion & habitat loss.
Large scale regional public works are being planned to address water quality/quantity issues.
The South Florida Ranch Landscape
Could/would: ranchers sell and state agencies buy water mgt services?
2005 Launched Florida Ranchlands Environmental Services Project (FRESP)

• Goal to design a PES program that is:
  • Based on market-like principles
  • Cost-effective
  • Transparent
  • Scalable
  • Feasible to administer

• Adaptive design process
  • Identify and work around and through constraints

$ 7 million pilot phase
6 years (2005-2011)
12,000 acres
8 Ranch Pilot Projects
Extensive working ranch landscapes, relying on modification to existing water management structures and strategies, enter into fixed term contracts to provide documented water related environmental services, above and beyond regulatory requirements creating a new profit center for ranch enterprises.
Adaptive design allows program to reflect and be supported by a complex web of constraints

- Buyer and seller preferences;
- Agricultural production systems & markets;
- Regulations—county, state and federal;
- Existing programs & institutions;
- Variation in site specific characteristics
Agree on service definition & feasibility

Nutrient Reduction Service
Lykes Bros. Inc. West Waterhole Marsh

2,500 acre marsh in existing reservoir treating off-site water
249 acre rehydrated wetland in a 659 acre drainage basin

Water Retention Service
Williamson Cattle Company
Agree on how to quantify expected level of service & baseline

- Rainfall
- Retention - uncontrolled
- Retention - controlled
- Average annual ac-ft water retention

Acre-feet of water retention:
- Pre-project: 1912 acre feet
- Post-project: 2178 acre feet
- Environmental Service: 266 acre feet
<table>
<thead>
<tr>
<th>FRESP Ranch Pilot Projects</th>
<th>WMA Impacted Acres</th>
<th>Ave Annual Incremental Water Retention Acre Feet</th>
<th>Ave Annual P Retention Pounds</th>
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</thead>
<tbody>
<tr>
<td>Water Retention Projects</td>
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<tr>
<td>Rafter-T</td>
<td>942</td>
<td>850</td>
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<tr>
<td>XL Ranch</td>
<td>364</td>
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<td>Alderman</td>
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<td>Buck Island Ranch</td>
<td>3,748</td>
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<td><strong>Total</strong></td>
<td><strong>6232</strong></td>
<td><strong>5,032</strong></td>
<td><strong>4,962 (2 mt)</strong></td>
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| Nutrient Removal Project    |                    |                                               |                               |
| Lykes Bros. Inc.            | 2,500              |                                               | 7,495 (3 mt)                  |
| **Total**                   | **8732**           | **5,032**                                     | **12,457 (6 mt)**             |
Agree on payment determination

Price agreement

• Fixed price offers
• Low bid
• Case by case negotiation
Agree on methods for verifying contract compliance

- Stage & rainfall measurement
- Monthly site visit
- Annual service payment
- Monthly rancher report
Agree on regulatory processes:

- Designed streamlined permitting process
  - Regional General Permit (US ACOE)
  - Fed and state MOU
  - T & E avoidance (NRCS & US FWS)
  - State permits
- End of Contract
  - T & E and wetlands footprint (state and federal)
Critical elements in designing a PES program

• Having a buyer

• Collaboration of key stakeholders

• Commitment to adaptive implementation
  – Willingness to stick to principles but be flexible

• Procedures that are feasibility to administer and cost-effective
  – Good enough
www.fresp.org

thank you