PMLevyCOLPEm Resource

From: Bruner, Douglas
Sent: Tuesday, March 15, 2011 6:50 AM
To: Paul Snead
Cc: Hambrick, Gordon A SAJ; LevyCOL Resource
Subject: FW: Slides for March 14 Meeting Opening Presentation
Attachments: March 14 FWS Meeting Levy.pptx

Importance: High

Paul,

The NRC and Corps met with the FWS on March 14 to discuss targeted surveys for T&E and consultation. The presentation used for the meeting is attached. Please note that the Red Cockaded Woodpecker is on NRC's list as a Federally listed species potentially occurring in some areas of the transmission line ROW.

The NRC also developed screen shots of areas that may require surveys. I will forward that information to you later today.

Thanks,

Doug

Hearing Identifier: Levy_County_COL_Public
Email Number: 797

Mail Envelope Properties (44CD2E65B0FF0E499CB32BC30CF781F052BABB3D0D)

Subject: FW: Slides for March 14 Meeting Opening Presentation
Sent Date: 3/15/2011 6:49:48 AM
Received Date: 3/15/2011 6:49:58 AM
From: Bruner, Douglas

Created By: Douglas.Bruner@nrc.gov

Recipients:
"Hambrick, Gordon A SAJ" <Gordon.A.Hambrick@usace.army.mil>
Tracking Status: None
"LevyCOL Resource" <LevyCOL.Resource@nrc.gov>
Tracking Status: None
"Paul Snead" <paul.snead@pgnmail.com>
Tracking Status: None

Post Office: HQCLSTR01.nrc.gov

Files	**Size**	**Date & Time**
MESSAGE	480	3/15/2011 6:49:58 AM
March 14 FWS Meeting Levy.pptx	4006397	

Options
Priority: High
Return Notification: No
Reply Requested: No
Sensitivity: Normal
Expiration Date:
Recipients Received:

U.S.NRC
UNITED STATES NUCLEAR REGULATORY COMMISSION
Protecting People and the Environment

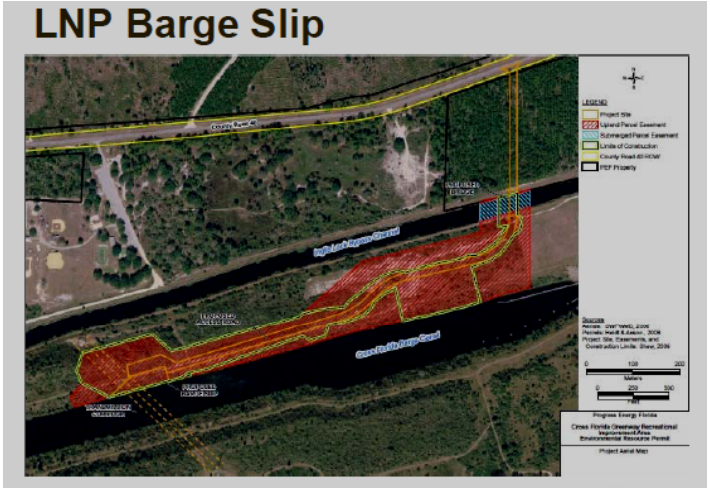
Roadmap to Section 7 Compliance Levy Nuclear Power Plant Units 1 and 2 Combined License Application Environmental Review

J. Peyton Doub, NRC
Michael Masnik, NRC
Amanda Stegen, PNNL
Bill Baber, ISL
Doug Bruner, NRC

March 14, 2011

Background

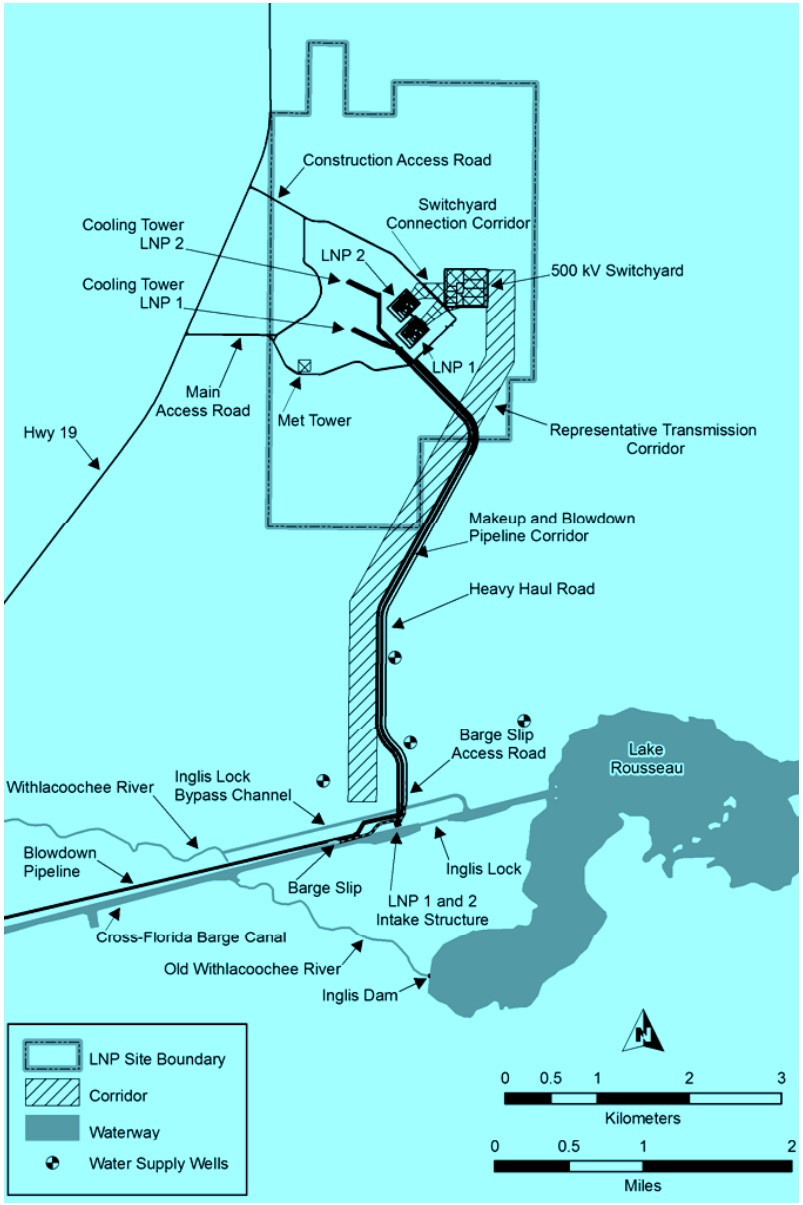
- COL Application submitted July 28, 2008
- Requires COL from NRC and DA Permit from Corps
- NRC and Corps agree to be Cooperating Agencies
- EIS Notice of Intent October 24, 2008
- EIS Scoping closed December 23, 2008
- Draft EIS and BA published August 2010
- Draft EIS Comment Period closed October 27, 2010
- FWS Comment Letter on BA October 26, 2010
- NRC/Corps Meeting to Discuss FWS Comments: January 4, 2011
- NRC develops Targeted Survey Strategy February 9-11, 2011
- PEF Meeting with FWS February 28, 2011
- NRC and Corps Meeting with FWS Today (March 14, 2011)
- Final EIS anticipated April 2012



Note: Red indicates an EIS milestone; green indicates a BA milestone

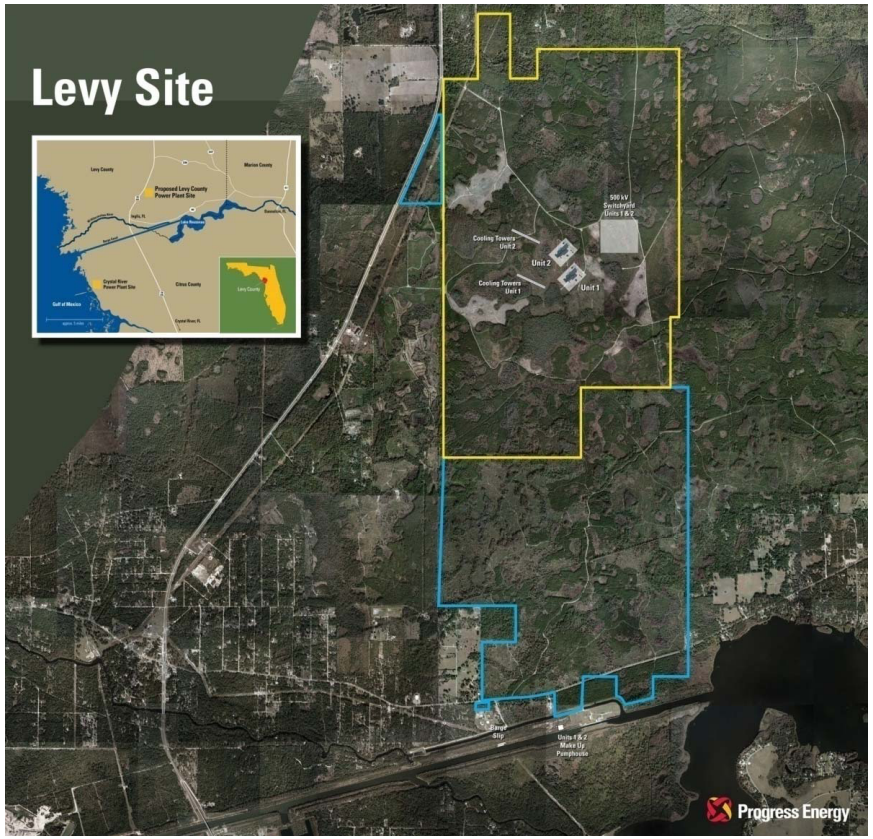
Project Summary

- Two Westinghouse AP-1000 advanced nuclear units
- Greenfield site near Inglis in Levy County
- Cooling water via intake pipeline from Cross Florida Barge Canal (CFBC)
- Groundwater from onsite wells for service water
- Blowdown pipeline to Gulf at existing Crystal River Energy Complex
- Barge slip on CFBC; heavy haul road from slip to site
- Approximately 180 miles of new transmission lines



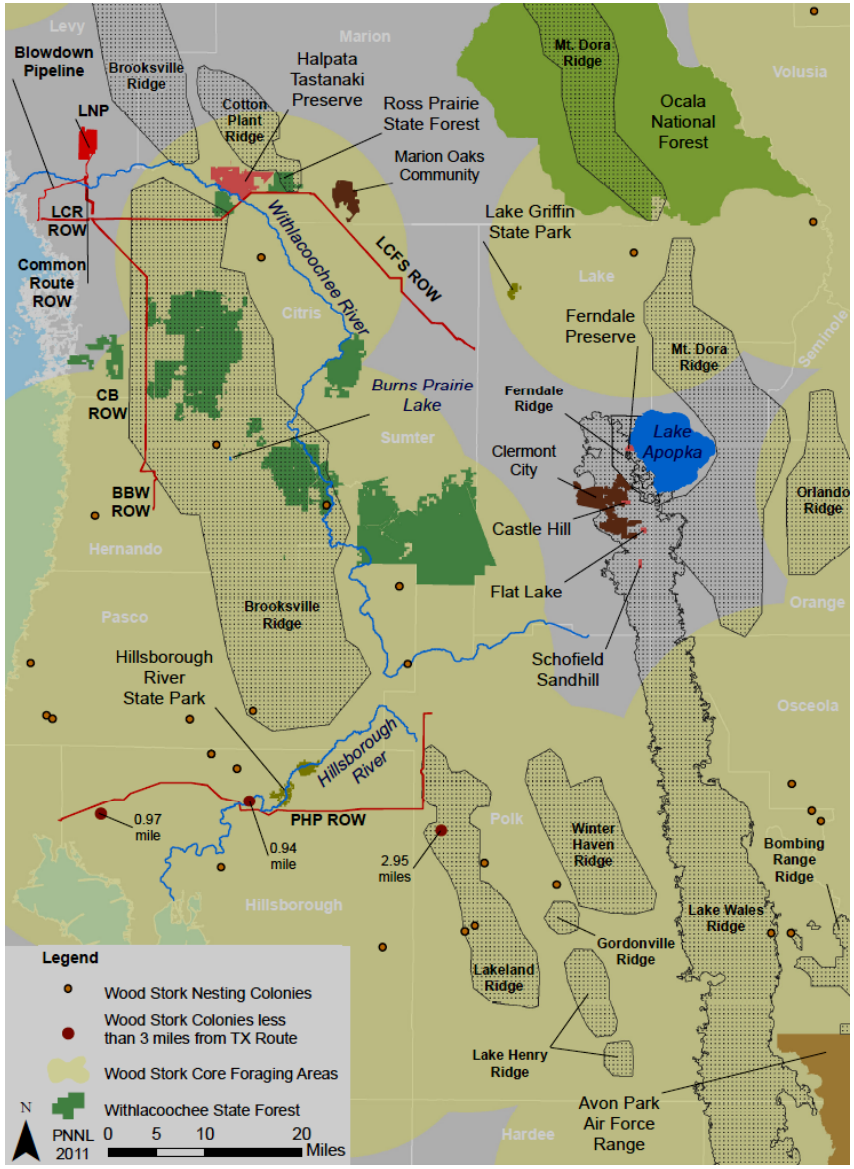
Proposed LNP Site

- PEF Property: 5200 ac.
  - Original Site (Yellow Line): 3105 ac.
  - Southern Tract (Blue Line): 2095 ac.
- History of intensive forestry
  - Mostly planted pine in uplands
  - Most wetlands partially logged or converted to planted pines
- Nuclear facilities proposed for construction on Original Site only
- Southern Tract – Acquired to accommodate dense concentration of
  - Roads
  - Pipelines
  - Transmission Lines
- Roads, pipelines, and transmission lines will also extend beyond Original Site and Southern Tract



Proposed LNP Transmission Lines

- LPC Line: LNP-Citrus SS (500 kV)
- LCR Line: LNP-CREC (500 kV)
- LCFS Line: LNP-Central FL South SS (500 kV)
- CB Line: Citrus SS-Brookridge SS (230 kV)
- BBW Line: Brookridge SS-Brooksville West SS (230 kV)
- PHP Line: Kathleen SS-Griffin SS (230 kV)
- **Total of approximately 180 mi. of new transmission lines.**



Federally Listed Species - Wildlife

Species	Status	Counties
Mammals		
Florida Saltmarsh Vole	Endangered	**Levy**
Florida Panther	Endangered	Polk
Florida Manatee	Endangered	**Levy**, Citrus, Hernando, Hillsborough, Pinellas
Birds		
Florida Grasshopper Sparrow	Endangered	Polk
Florida Scrub Jay	Threatened	**Levy**, Citrus, Marion, Sumter, Lake, Hernando, Hillsborough, Pinellas, Polk
Piping Plover	Threatened	Pinellas, Hillsborough
Wood Stork	Endangered	**Levy**, Citrus, Marion, Sumter, Lake, Hernando, Hillsborough, Pinellas, Polk
Red-cockaded Woodpecker	Endangered	**Levy**, Citrus, Marion, Sumter, Lake, Hernando, Pinellas, Hillsborough, Polk
Audubon's Crested Caracara	Threatened	Polk
Everglades Snail Kite	Endangered	Marion, Sumter, Lake, Polk
Reptiles		
American Alligator	Threatened (SA)	**Levy**, Citrus
Eastern Indigo Snake	Threatened	**Levy,** Citrus, Marion, Sumter, Lake, Hernando, Pinellas, Hillsborough
Sand Skink	Threatened	Marion, Lake, Polk
Bluetail Mole Skink	Threatened	Polk
Fish		
Gulf Sturgeon	Threatened	**Levy**

Federally Listed Species
Plants (Slide 1 of 2)

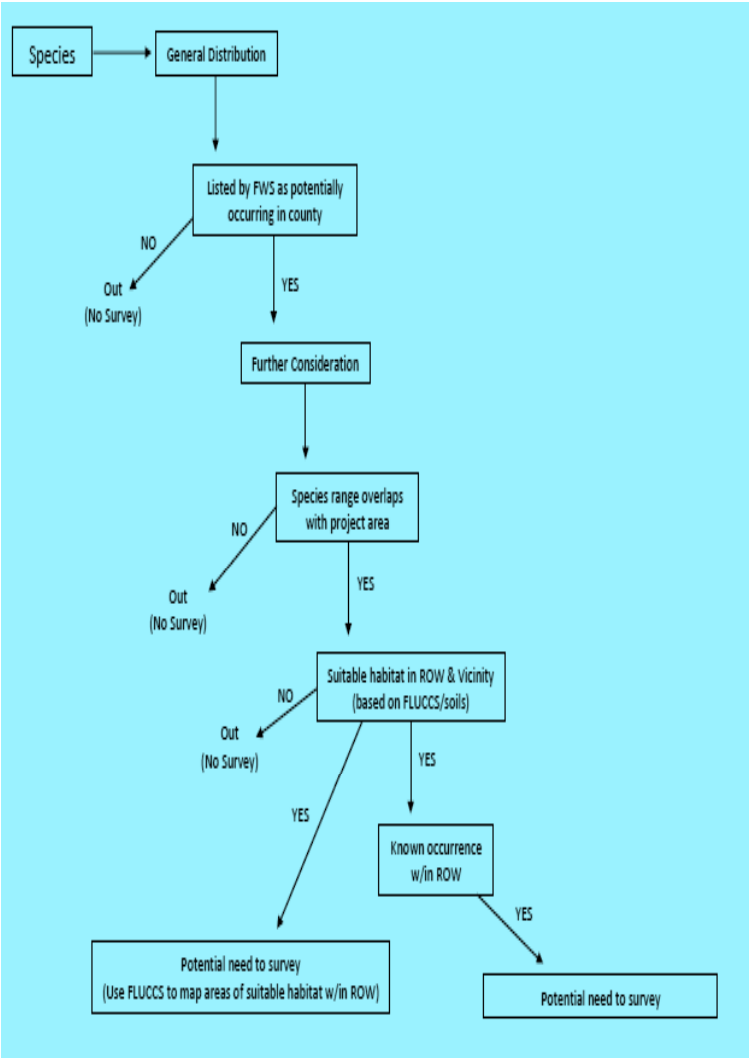
Species	Status	Counties
Florida Bonamia	Threatened	Marion, Lake, Polk
Brooksville Bellflower	Endangered	Hernando
Pygmy Fringe Tree	Endangered	Lake, Polk
Florida Golden aster	Endangered	Pinellas, Hillsborough
Longspurred Mint	Endangered	Marion
Scrub Wild Buckwheat	Threatened	Marion, Lake, Polk
Cooley's Water Willow	Endangered	Hernando
Britton's Beargrass	Endangered	Lake, Hernando, Polk
Lewton's Polygala	Endangered	Marion, Lake, Polk
Small's Jointweed	Endangered	Polk
Scrub Plum	Endangered	Lake, Polk
Wide-leaf Warea	Endangered	Lake, Polk
Carter's Mustard	Endangered	Polk

Federally Listed Species
Plants (Slide 2 of 2)

Species	Status	Counties
Pigeon Wings	Threatened	Lake, Polk
Short-leaved Rosemary	Endangered	Polk
Avon Park Harebells	Endangered	Polk
Scrub Mint	Endangered	Polk
Scrub Blazingstar	Endangered	Polk
Scrub Lupine	Endangered	Polk
Papery Whitlow-wort	Threatened	Lake, Polk
Wire Weed	Endangered	Polk
Florida Ziziphus	Endangered	Polk
Highlands Scrub Hypericum	Endangered	Polk

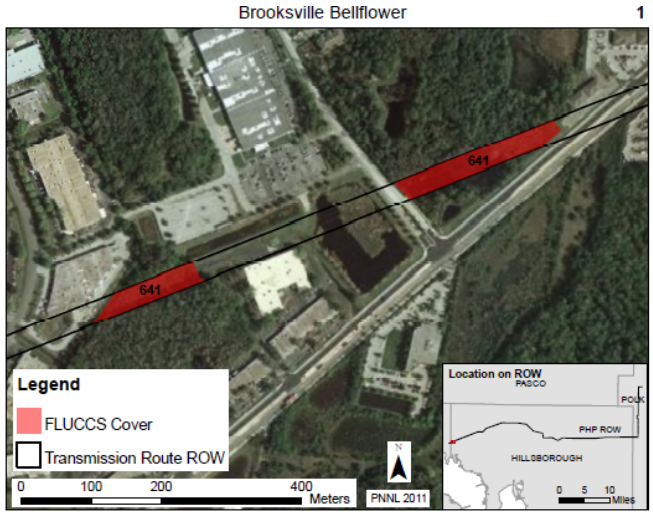
Species Screening Process

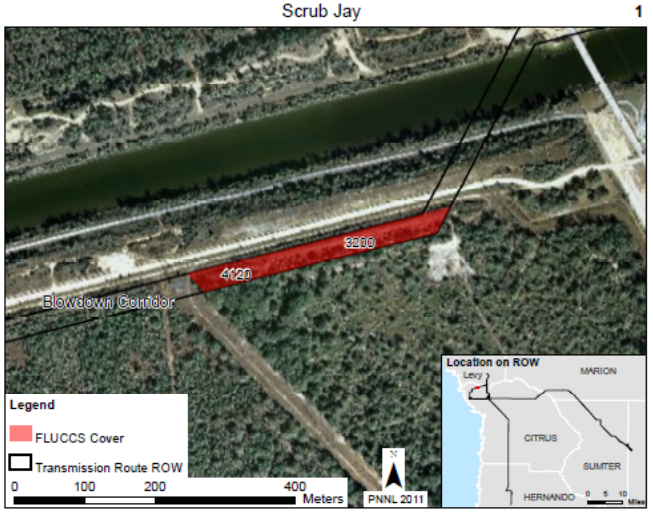
- Objective was to identify Federal species requiring further evaluation and possible targeted field survey
- Started with FWS on-line county occurrence lists, accessed January 28, 2011.
- Eliminated from further consideration species whose distribution in the subject counties is limited to geographic features outside the Project Area .
- Overlaid outline of the Project Area over 3-digit FLUCCS data for subject counties.
- Although FLUCCS data layers for the project area are maintained by SWFWMD, the applicant (PEF) had refined the FLUCCS data based on ground observations made while investigating portions the Project Area. The screening process used the refined FLUCCS data whenever available.
- Eliminated from further consideration those species for which the Project Area lacks suitable habitat in counties of reported distribution.
- For each species not eliminated, developed “screen shot” maps depicting areas of suitable habitat in counties of reported distribution.



Products of Screening Process

- Identify species requiring further evaluation and possible targeted survey.
- Produce “Screen Shots” identifying locations where those species may occur.
- Make Screen Shots available to help identify possible strategies for further evaluation and possible targeted survey.





Species Identified for Further Consideration Terrestrial Plants

Species	Habitat (FLUCCS)	Counties	Acres
Florida bonamia	412, 413, 421, 432	Lake, Hillsborough, Marion, Polk	92
Brooksville bellflower	520, 641, 643, 644, 653, 6219, 6439	Hernando, Hillsborough	57
Florida golden aster	211, 212, 320, 321, 412, 413, 421, 432	Hillsborough, Pinellas	246
Longspurred mint	412, 413, 421, 432	Marion, Sumter	120
Cooley's water willow	414, 423, 425, 431, 434, 438, 615, 617, 630	Hernando, Sumter	78
Britton's beargrass	412, 413, 421, 427, 432	Lake, Hernando, Marion, Polk	98

Possible Plant Survey Times

Species	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB
Florida bonamia	V	V	F	F	F	F	V	V	V	V	V	V
Brooksville bellflower	F	F	F									
Florida golden aster						F	F	F	F			
Longspurred mint							F	F				
Cooley's water-willow						F	F	F	F	F		
Britton's beargrass	F	F	F	V	V	V	V	V	V	V	V	V

F: Reported flowering period
V: Possible to identify using vegetation parts
Pink Shading: Optimal survey period (as indicated by A. Dziergowski, USFWS Botanist)
Note: Optimal survey period is late March to early April for Brooksville bellflower.

Species Identified for Further Consideration Terrestrial Wildlife

Species	Habitat (FLUCCS)	Counties	Acres
Florida scrub jay	320, 321, 412, 413, 421, 432	All Project Counties	291
Wood stork	560, All 600 Series	All Project Counties	2406
Red-cockaded woodpecker	411, 412, 413, 415, 419	All Project Counties	224
Sand skink	412, 413, 414, 421, 423, 432	Lake, Marion, Polk	92
Eastern indigo snake	211, 212, 213, 214, 215, 310, 320, 321, 411, 412, 413, 421, 432, 641, 643	All Project Counties	1560

Impacts will also be assessed for Florida panther, but no targeted surveys are needed.

Species Identified for Further Consideration Florida Manatee (Aquatic Mammal)

Issues raised in USFWS Letter of October 26, 2010

- Provide copy of the CREC Manatee Protection Plan approved by the State of Florida
- Provide information on the capacity of the proposed boat ramp on the CFBC (number of publically available boat-trailer parking spaces)
- Address the impact of the potential loss of warm water from CREC on manatees resulting from the shutdown of the two fossil once-through cooling stations.

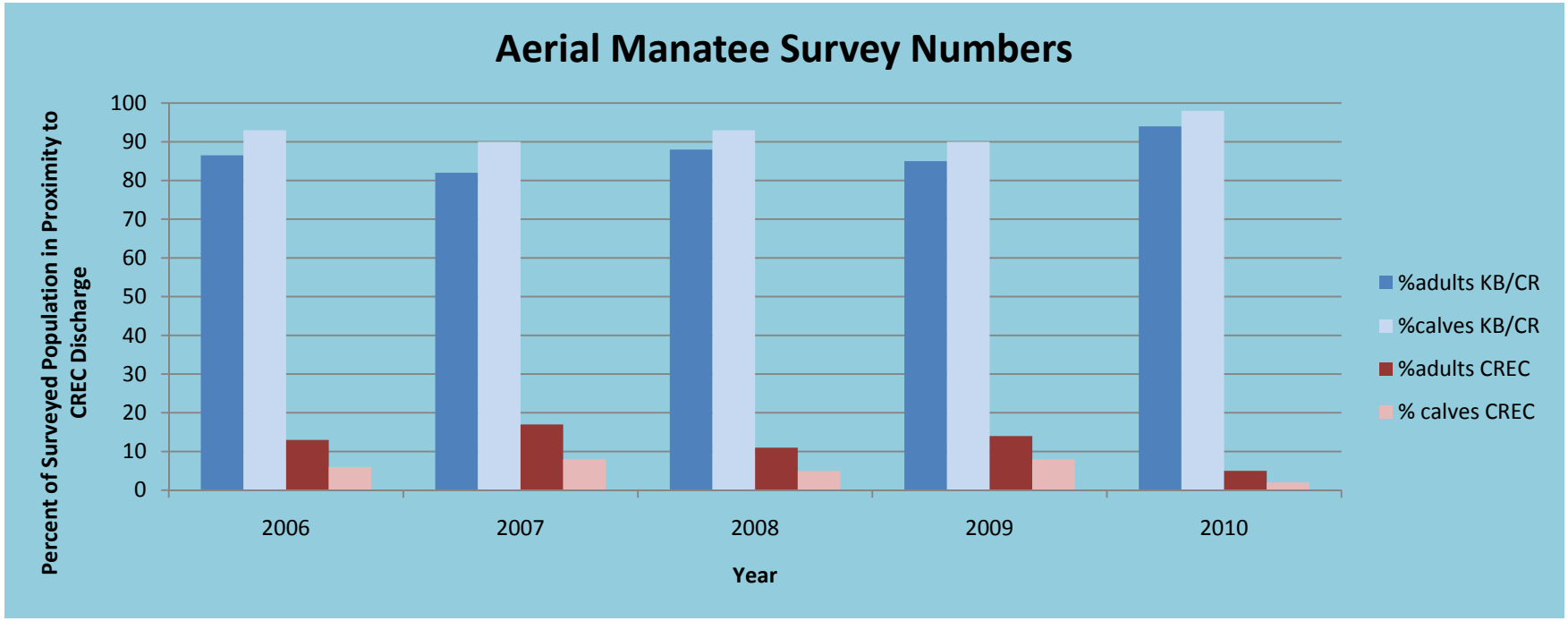
MANATEE AERIAL SURVEYS CRYSTAL RIVER AREA

Year	Surveys	Kings Bay	Crystal River	Upper Homosassa River	Lower Homosassa River	Crystal River Discharge		Cross Florida Barge Canal		Total
2011*	5	1472	146	204	24	31	1.6%	4	0.3%	1881
2010	26	4249	125	897	123	262	4.6%	7	0.1%	5663
2009	24	2281	171	727	114	405	11%	23	0.6%	3721
2008	19	2016	145	407	134	268	8.9%	33	1.1%	3003
2007	27	2704	267	613	224	607	14%	43	0.9%	4485
2006	25	2539	270	532	188	424	11%	13	0.3%	3966

Data provided by Joyce Kleen, Chassahowizka National Wildlife Refuge Complex, 8 Mar 11

*Through 1 Mar 2011

Species Identified for Further Consideration Florida Manatee (Aquatic Mammal)



Percent of surveyed manatee adults and calves within the vicinity of the Crystal River Energy Complex (CREC) discharge by year (Jan – Dec) and location.
KB/CR = Kings Bay/Crystal River