

### **Turkey Point Nuclear Power Plant**

### **Units 6 & 7**

#### **Environmental Panel**

**Bill Maher Senior Licensing Director** 

Paul Jacobs Engineering Supervisor

Rick Orthen Licensing Engineer



## Water resource selection was an important project design consideration

### **FPL's Turkey Point Environmental Stewardship**



- Use of an existing site
- Extensive use of existing transmission corridors
- Construction road network restoration
- Wetland mitigation projects
- Beneficial reuse of reclaimed water
- Novel backup water supply using radial collector wells







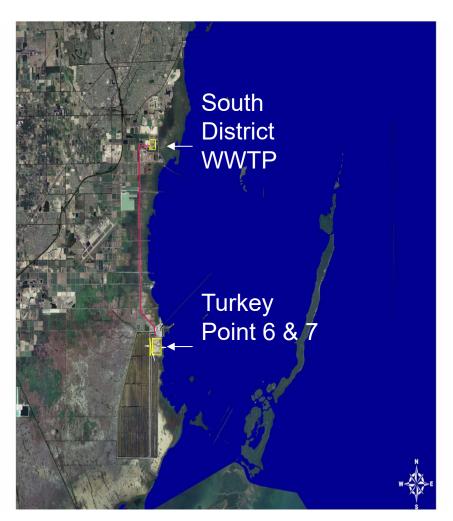




# Units 6 & 7 will use reclaimed water from Miami-Dade County as its primary source of cooling water

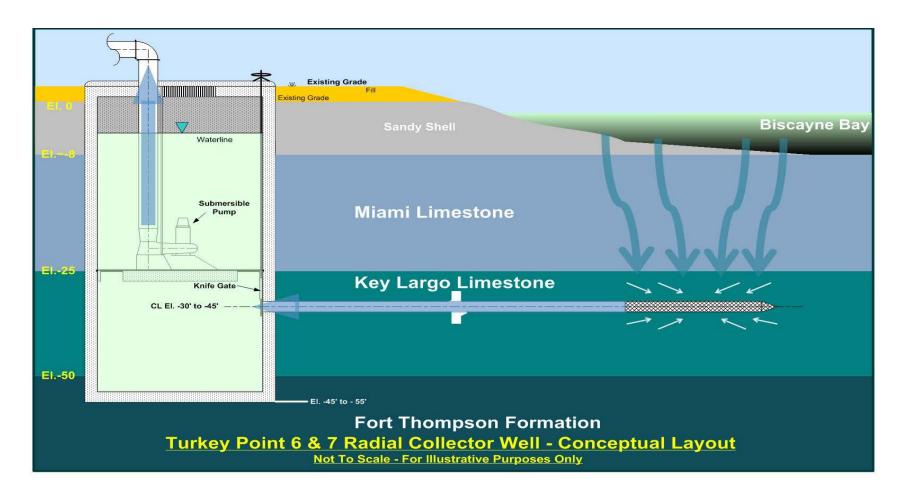
### **Reclaimed Water**

- The use of reclaimed water helps the County meet its water reuse requirements and allows FPL to operate Units 6 & 7 without impacts to surface water bodies
- FPL will build a treatment facility on site in order to optimize the reclaimed water quality for efficient plant operation





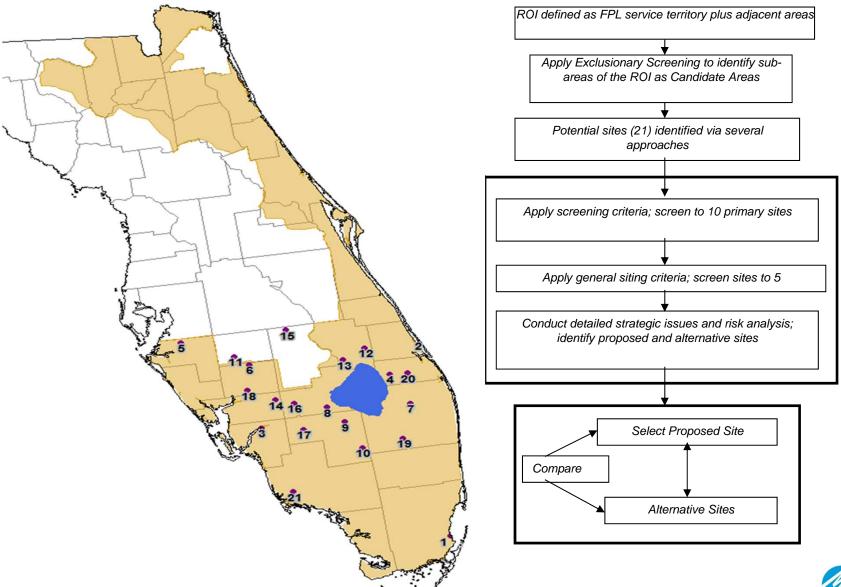
## Radial collector wells provide a back-up cooling water supply when reclaimed water is not available



Well design & location draws saltwater from beneath Biscayne Bay, avoiding impacts to marine environment



### **FPL Augmented Site Selection Process**





### Based on the site selection analysis, no alternative site is environmentally preferable to Turkey Point

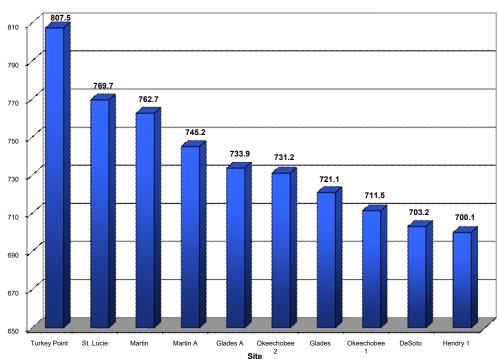
### **Evaluation of Sites**

#### **FPL's Site Selection Process**

- Identified the Region of Interest with focus on Miami load center
- Identified 21 potential sites through original and augmented screening
- Applied 34 weighted screening criteria to identify five candidate sites

### **Turkey Point Designated as the Proposed Site**

- Ranked highest in the technical evaluation
- Rates more favorable in 8 of the 12 considerations
- Rates equally favorable in the remaining 4 considerations





### Potential project effects on ESA-listed species are small

#### **Endangered Species Act (ESA) Consultation**

### National Marine Fisheries Service April 2017

- Potential project effects to listed species found to be discountable or insignificant
- Proposed action is not likely to adversely affect ESA-listed species (five species of sea turtles and smalltooth sawfish)



### U.S. Fish and Wildlife Service June 2017

- Biological Opinion conclusions regarding proposed project
- Would not likely put any species in jeopardy of extinction
- May affect and could likely adversely affect five listed species (one mammal, two reptiles, three birds)
- Incidental Take Statement limits
   were established that are not
   likely to result in jeopardy to the
   crocodile, indigo snake, snail kite,
   Florida panther, red knot, or wood
   stork





