

National Park Service

Everglades National Park

Notes: slides 1-12
provided general overview
of project information



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WELCOME

Snake Bight Pole and Troll Zone Public Workshop
March 8, 2012, Key Largo, FL

Agenda

- 5:30 – 6:30 Open House (review and discuss information, provide input)**
- 6:30 – 7:00 Presentations**
- 7:00 – 8:00 Q&A, Discussion and Comment**

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Welcome to the Snake Bight Pole and Troll Zone Workshop

Because of your interest in Everglades National Park and Florida Bay, we are asking for your input on the Snake Bight Pole and Troll Zone, now that it's been in place for about one year.

Please look at the information, listen to the presentations, talk to staff, ask questions and share your thoughts. There are several ways to comment tonight, or before the comment period ends on March 31, 2012 (see the comment form for website and mailing options).

Workshops are from 5:30 to 8:00 p.m.

Campbell Agricultural Center, Homestead, FL (March 5, 2012)

Nelson (Monroe Co.) Gov't Center, Key Largo, FL (March 8, 2012)

Agenda

5:30 – 6:30 Open House (review and discuss information, provide input)

6:30 – 7:00 Presentations

7:00 – 8:00 Q&A, Discussion and Comment

Thank you for participating!

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Everglades National Park Establishment Act

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The said area or areas shall be permanently reserved as a wilderness, and no development of the project or plan for the entertainment of visitors shall be undertaken which will interfere with the preservation intact of the unique flora and fauna and the essential primitive natural conditions now prevailing in this area.

48 Stat. 816, May 30, 1934



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Audubon of Florida, the Nature Conservancy (5/15/09) and Resolution from Sanctuary Advisory Council (6/16/09)

“Prior to the finalization of the GMP, pilot the Pole/Troll Zone concept as soon as possible within Garfield Bight and from the Bowlegs cut to the northernmost Peterson Key.”

Florida Keys Fishing Guides Association – 5/14/09

“Snake Bight- We recommend that a pilot area be established as soon as possible as a poll & troll area North of Tin Can Channel with ingress/egress areas be marked into Jimmy's Lake and Porpoise Point.”

Coastal Conservation Association – 5/7/09

“CCA strongly recommends that the NPS review the pole and troll zones and access channels presently in place in the Merritt Island National Wildlife Refuge and Fort Desoto area..... Areas such as Snake Bight or Garfield Bight that show a pattern of scarring could be used as a pilot project and its effectiveness could be measured over time.”

National Parks Conservation Association – 5/15/09

“NPCA supports the recommendations of Alternative E 2.5 and others that ENP pilot test a pole/troll areas(s) to begin the learning process and demonstrate the merits of this resource protection strategy.”

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Summary of public comments

	SUM	% of TOTAL
SUPPORT ZONE and LOCATION	161	94.7
DO NOT SUPPORT	3	1.8
NO PREFERENCE	6	3.5
RECOMMEND ANOTHER AREA	0	0
PORPOISE PT ACCESS	4	2.4
FINGER CHANNELS OFF SB CHANNEL	5	2.9
JIMMY'S LAKE ACCESS FURTHER NORTH	3	1.8
ACCESS WEST OF SB CHANNEL	3	1.8
	3	1.8
EXPAND SB CHANNEL ACCESS TO NORTH		
NO IDLE ZONE IN JIMMY's LAKE	4	2.4
NO TROLLING MOTORS	6	3.5
CAP THRUST ON ELECTRIC MOTORS	3	1.7



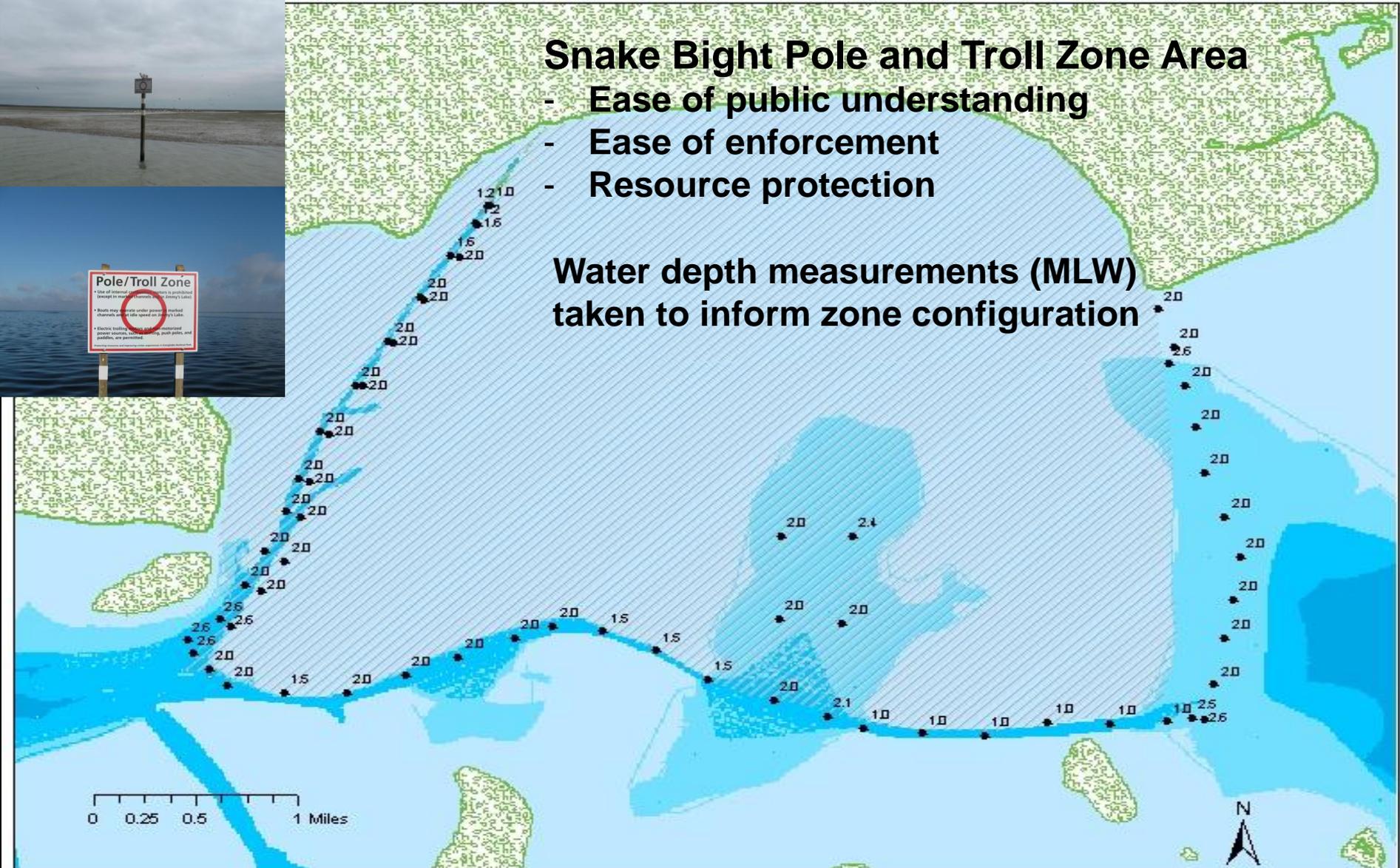
Pole/Troll Zone

- Use of internal combustion engines is prohibited except in marked channels, unless otherwise posted.
- Boats may operate under power in marked channels unless otherwise posted on this sign.
- Electric trolling motors, outboard motors, power saws, and other such tools, and paddles, are permitted.

Snake Bight Pole and Troll Zone Area

- Ease of public understanding
- Ease of enforcement
- Resource protection

Water depth measurements (MLW) taken to inform zone configuration



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Snake Bight Pole/Troll Zone – Bilingual Educational Brochure

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The waters of Florida Bay are often placid and stretch off in the distance without a ripple. Heat gives haze to the horizon so that it is sometimes almost impossible to tell where the water stops and the sky begins.

—Daniel B. Beard, Everglades National Park Project, October 1938

What Is the Snake Bight Pole/Troll Zone?

Snake Bight—one of the most popular places in all of Florida Bay and Everglades National Park—is now a designated pole/troll zone. This zone was created to provide enhanced protection of Snake Bight's sensitive aquatic vegetation and wilderness resources, improve the quality of fish fishing, enhance paddling and wildlife-viewing opportunities, and expand education on proper shallow-water boating techniques.

Boaters need to be aware that within the pole/troll zone internal combustion motors can only be used in Tin Can or Snake Bight transit: Jimmy's Lake area. Within pole/troll zone, boats may only be propelled by push poles, paddles, or electric trolling motors.

Keep in mind that you may end up a mile or more from the nearest channel or area allowing internal combustion motor use, so proper planning is essential. Before heading out, check the day's tides and weather forecast, particularly wind conditions and the likelihood of thunderstorms. It is also important to know your physical capability to navigate this zone using a push pole or paddle, and your motor's battery capacity.

Be aware that at low tide, many areas of the zone are less than one foot in depth and some flats become exposed. Consequently, the best vessels to use in the pole/troll zone include shallow-draft boats, canoes and kayaks.

Protecting Seagrass

Seagrass is one of the most important components of the Florida Bay ecosystem. These lush meadows provide vital habitat for many

animals, including sea turtles, manatees, crocodiles, and wading birds. In addition, more than 200 species of fish and 30 species of crustaceans, many of which are important from a commercial as well as a recreational standpoint, call these areas home.

Boating in waters too shallow can churn up sediment that reduces water clarity and the amount of sunlight needed for these plants to thrive. It can also lead to boat groundings and propeller scarring, which damage fragile seagrass beds. Each year, park rangers investigate about 100 groundings in the bay, while many more go unreported. In a recent study, park scientists detected 12,000 individual seagrass scars in Florida Bay with a combined length of 325 miles.

Depending on their severity, propeller scars can take years or decades to heal and can destroy habitat for fish and other Florida Bay animals, including several threatened and endangered species.

It is expected that the pole/troll zone will lead to increased protection of these habitats and Florida Bay's other outstanding resources, including the bay bottom—which is federally designated wilderness.

While providing better visitor experiences, the pole/troll zone will also help protect the bay bottom, which is federally designated wilderness. The zone will also help protect the bay bottom, which is federally designated wilderness.

How Will We Know It's Working?

The park is implementing a monitoring plan to help assess the pole/troll zone's effectiveness in protecting seagrass, while enhancing fishing and other recreational experiences. In addition, the park plans to meet periodically with users to obtain feedback on how well the zone is working and ways to improve it.

If you would like to provide feedback on the Snake Bight Pole/Troll Zone, send an e-mail to ever_formation@nps.gov. For additional information and updates, please visit the park's website: www.nps.gov/ever.

If your intended destination on Florida Bay includes Snake Bight, take a few moments to review the map above for at the Flamingo boat ramp and the signs you will find out on the water (left).

Please note, the map is not for navigational purposes; for safe boating, nautical charts are indispensable.

Pole/Troll Zone

Only electric trolling motors, push poles, and paddles are permitted.

IDLE SPEED

NO WAKE

POLE/TROLL ZONE

USE OF COMBUSTION MOTORS PROHIBITED



Las aguas de la Bahía de la Florida a menudo se expanden en la distancia sin una sola onda. El calor produce una bruma en el horizonte y así algunas veces es imposible decir dónde termina el agua y empieza el cielo.

—Daniel B. Beard, Everglades National Park Project, October 1938

¿Que es un zona de Pole/Troll de Snake Bight?

Snake Bight—Una de las áreas más populares en toda la Bahía de la Florida y el Parque Nacional Everglades—es ahora una zona designada Pole/Troll (pértiga/motor eléctrico). La zona fue creada para aumentar la protección de la vegetación acuática y los recursos naturales de Snake Bight, mejorar las oportunidades para remo y avistamiento de vida silvestre y expandir la educación en el uso de técnicas apropiadas para la navegación en aguas poco profundas.

Los navegantes deben tener en cuenta que dentro de la zona de Pole/Troll los motores de combustión interna están solo permitidos en los canales Tin Can o Snake Bight (donde el tránsito rápido está permitido) y el Jimmy's Lake área de marcha lenta sin estufa. En todas las otras embarcaciones apropiadas remotas o

Tenga en cuenta que usted puede terminar a una milla o más del próximo canal o zona de navegación lenta, así que planear adecuadamente es muy importante. Antes de salir averigüe las mareas, las condiciones del tiempo, particularmente los vientos y nubes, así como las posibilidades de tormentas eléctricas. Usar también debe pensar en sus condiciones físicas para navegar la zona de Pole/Troll usando la pértiga o remo, o si tiene suficiente batería para usar su motor eléctrico.

Tenga en cuenta que durante la marea baja, muchas áreas de la zona tienen menos de un pie de profundidad y algunos bancos quedan expuestos. En consecuencia las mejores embarcaciones para la zona de Pole/Troll son los botes de muy poco calado, las canoas y los kayaks.

Protegiendo los pastos marinos

Los pastos marinos son uno de los componentes más importantes del ecosistema de la Bahía de la Florida. Estas praderas sumergidas

proveen de hábitat a muchos animales, incluyendo tortugas marinas, manatíes, cocodrilos y aves zancudas. Más de 200 especies de peces y 30 especies de crustáceos viven aquí, muchas de ellas importantes desde el punto de vista comercial y recreacional.

Navegar en aguas poco profundas puede agitar los sedimentos y enturbiar el agua, reduciendo la luz que estas plantas necesitan para prosperar. A simlamo puede provocar encallamientos y ruroos producidos por las hélices en este frágil ecosistema. Cada año, los guarda parques investigan cerca de 100 encallamientos en la bahía y muchos más quedan sin reportarse. En un estudio realizado en la Bahía de la Florida, científicos del parque descubrieron en los bancos marinos, 12,000 surcos individuales que sumados alcanzan una longitud de 325 millas. Dependiendo de su severidad, los surcos producidos por las hélices pueden tomar años y hasta décadas para recuperarse, destruyendo el hábitat de los peces y otros animales marinos incluyendo especies en peligro de extinción.

Se espera que la zona de Pole/Troll lidere el incremento en la protección de estos hábitats de la Bahía de la Florida y otros excepcionales recursos, incluyendo el fondo de

esta designado oficialmente como áreas silvestres afectando al mismo tiempo mejores experiencias a los visitantes.

¿Como sabremos si está funcionando?

El parque ha implementado un plan de monitoreo para evaluar la efectividad del programa de Pole/Troll en la protección de los pastos marinos mientras se mejoran las oportunidades para la pesca y la recreación. El parque está planificando reuniones con los usuarios de la Bahía para entender cómo está funcionando la zona, y cómo mejorar las reglas de uso.

Si usted quiere participar en proveer información sobre la zona de Pole/Troll de Snake Bight, por favor comuníquese por e-mail a ever_formation@nps.gov. Para información adicional y noticias visite la página web del parque a www.nps.gov/ever.

Pole/Troll Zone

Only electric trolling motors, push poles, and paddles are permitted.

IDLE SPEED

NO WAKE

POLE/TROLL ZONE

USE OF COMBUSTION MOTORS PROHIBITED

Si su destino en la Bahía de la Florida incluye Snake Bight, tómeselo un momento para revisar el mapa de arriba y las señales que encontrará en el agua.

Por favor tenga en cuenta que este mapa no debe ser usado para la navegación, para su seguridad las cartas de navegación son imprescindibles.

The pole/troll zone project and this brochure were made possible in part with support from the Herman Lucerne Memorial Foundation, the Friendly Flamingo Fishing Tournament and the South Florida National Parks Trust.

La zona de Pole/Troll y este folleto fueron creados gracias a la ayuda del Herman Lucerne Memorial Foundation, el Friendly Flamingo Fishing Tournament y el South Florida National Parks Trust.

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Boat Ramp Sign



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Attention Boaters Snake Bight Pole/Troll Zone

To provide enhanced protection of Snake Bight's sensitive aquatic vegetation and wilderness resources; improve the quality of flats fishing; enhance paddling and wildlife-viewing opportunities; and expand education on proper shallow-water boating techniques; the Snake Bight area is now designated as a pole/troll zone.

In the Snake Bight Pole/Troll Zone, your internal combustion motor cannot be used—except in Tin Can and Snake Bight channels (where on-plane transit is permitted), and the Jimmy's Lake idle speed-no wake area. Within the pole/troll zone, vessels may only be propelled by push poles, paddles, or electric trolling motors. Of course, seasonal or local conditions that result in low-water levels or low tides will require additional attention when navigating in these areas.

Care should always be taken when navigating the park's shallow waters. In a recent study, park scientists detected 12,000 individual seagrass scars throughout the bay. The seagrass scars had a combined length of 325 miles.

Seagrass is one of the most important components of the Florida Bay ecosystem. These lush meadows provide vital habitat for many animals, including sea turtles, manatees, crocodiles, and wading birds. Additionally, more than 200 species of fish and 30 species of crustaceans, many of which are important from a commercial as well as a recreational standpoint, call these areas home.

Thank you for doing your part to protect Everglades National Park. Enjoy your visit.

What to Look for...

If your intended destination on Florida Bay today includes Snake Bight, take a few moments to review the signs you will find out on the water, as well as the map of the area.

Please note, this map is not for navigational purposes; for safe boating, nautical charts are indispensable.

POLE/TROLL ZONE



USE OF COMBUSTION
MOTORS PROHIBITED

IDLE SPEED



NO WAKE

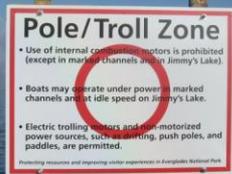
Pole/Troll Zone

- Use of internal combustion motors is prohibited (except in marked channels).
- Boats may operate on plane in marked channels and at idle speed in Jimmy's Lake.
- Electric trolling motors and non-motorized power sources, such as drifting, push poles and paddles, are permitted.

Protecting resources and improving visitor experiences in Everglades National Park.

For More Information...

Additional information, including the Snake Bight Pole/Zone educational brochure, can be found on the Everglades National Park website (www.nps.gov/ever) and in park visitor centers.



Protecting resources and improving visitor experiences in Everglades National Park.



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Questions (comment period through March 31)

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1. Provide a summary of your experiences in the Snake Bight Pole and Troll Zone (PTZ) area (before and after PTZ implementation).
2. If you have visited the Snake Bight PTZ since January 1, 2011, describe the quality of your experience(s). If you also visited the area before the PTZ went into effect generally describe the quality of those experiences, and any differences you have observed regarding visitor use and resource conditions in the zone.
3. Identify what you like most about the current Snake Bight PTZ.
4. Identify what you like least about the current Snake Bight PTZ.
5. Describe changes to the current Snake Bight PTZ you would recommend to park managers in order to improve the zone (e.g., zone configuration, signage, educational materials, enforcement) and why those changes should be considered.
6. Provide any other thoughts you have about the Snake Bight PTZ and shallow-water protection and visitor use not discussed in the previous questions.

Comments can be provided on-line (www.nps.gov/ever) or by mail: *Everglades National Park, Park Planning Office –Snake Bight PTZ, 40001 State Road 9336, Homestead, FL 33034.*

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Determining Success

- **Monitoring of seagrass conditions**
 - Pre-implementation baseline, about every 3 years
 - High-resolution aerial photography
 - In-water field investigation
 - Determining if objectives are being met – conditions are improving
- **Modify fishing survey with questions about experiences in Snake Bight**
- **Annual public workshops**
 - Public views on zone success
 - Effectiveness of outreach/educational strategies
 - Modify/change as needed



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General Management Plan Schedule:

- Spring 2012:** Flamingo Concessions and Gulf Coast Site Project Planning
- Summer/Fall 2012:** Revise Draft GMP incorporating new information for Flamingo, Gulf Coast site
- Spring 2013:** Issue Draft GMP for Public Review and Comment
- 2014 & beyond:** Issue Final GMP and Record of Decision; begin GMP Implementation



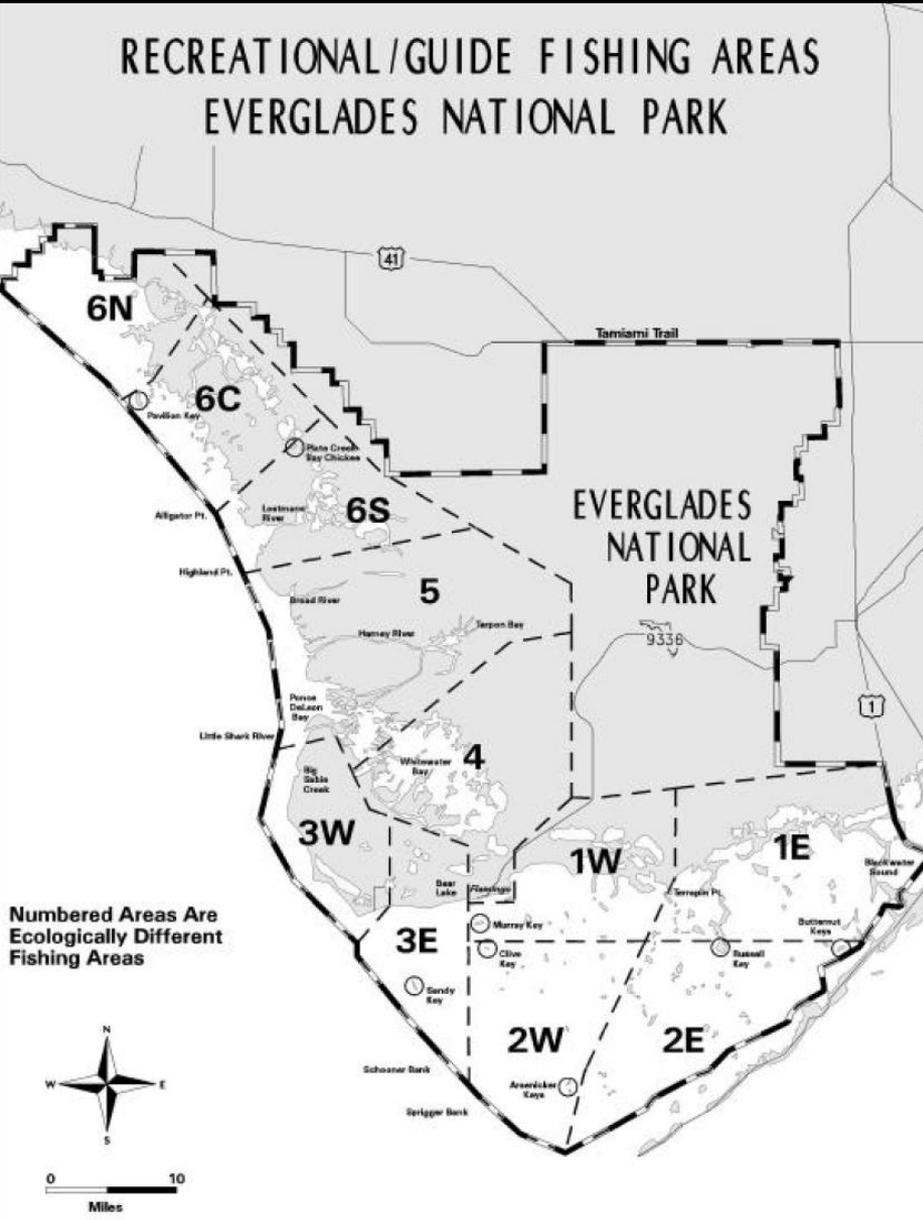
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Note: this slide and next focused on new fishing survey questions



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Sportfish Monitoring Program

- started in 1972
- evaluate parkwide sportfishing effort
- informs fisheries management options

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Survey questions regarding Snake Bight PTZ

- Tell me about your fishing experience in the PTZ
- Did you fish there before it was a PTZ?
- Do you believe fishing has improved since PTZ implementation?
- Was the overall fishing experience enhanced with the PTZ?
- If you were a park manager, what aspects of the PTZ would you change?



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Note: this slide focused on
on-the-water education
and enforcement



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On the water park management activity

- lots of ranger patrolling from Flamingo and Key Largo districts
- education mode for much of year 1; increased enforcement efforts in recent months
- very good public compliance
- good feedback throughout year; in summer – more requests for access options



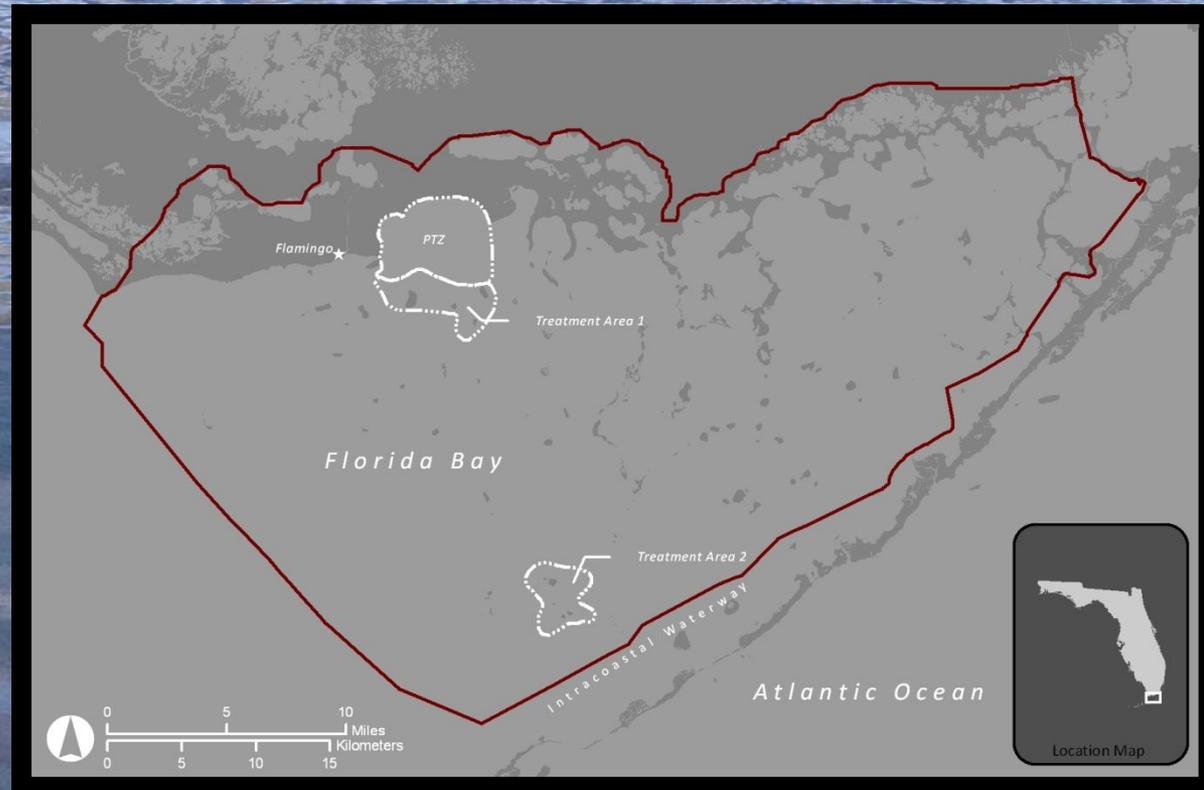


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Snake Bight PTZ Seagrass Monitoring Project Objectives



- Quantify the amount of prop scarring within Snake Bight PTZ and compare it to other areas in Florida Bay that do not have zone restriction management (Treatment Areas 1 and 2)
- Evaluate whether passive restoration is a viable approach to seagrass management in ENP



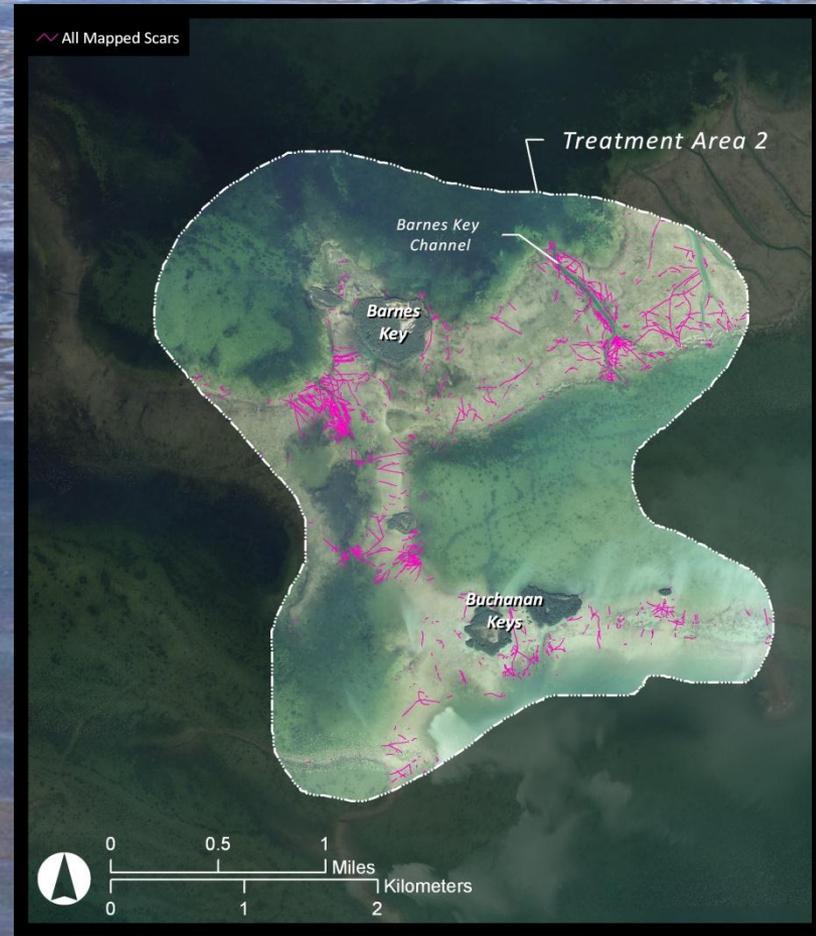
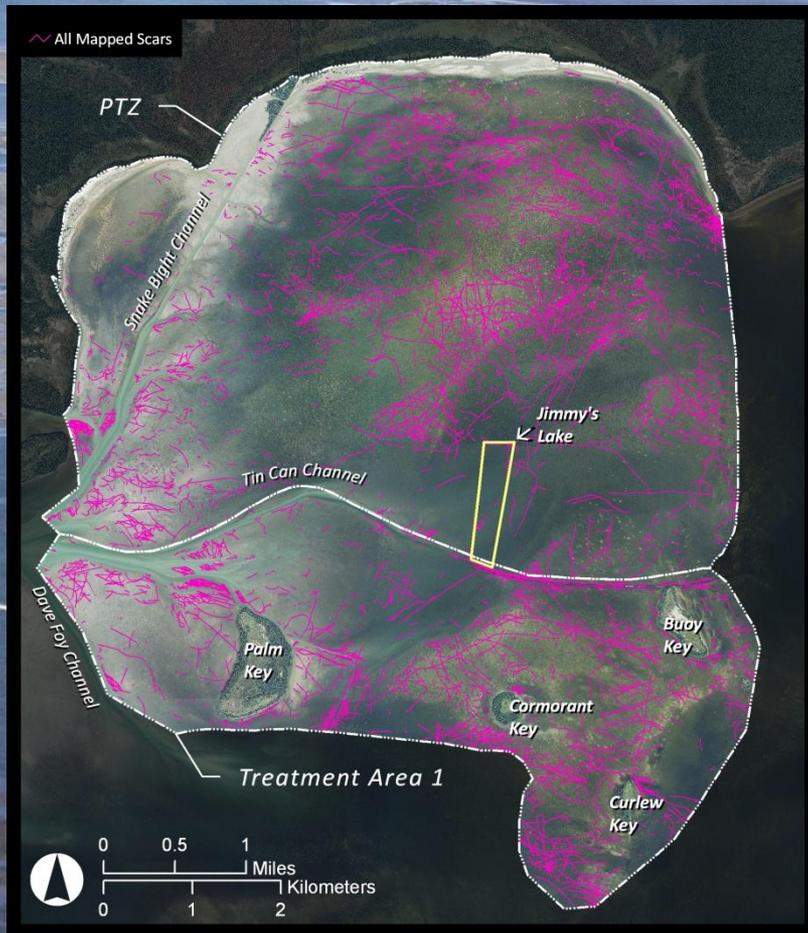
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Snake Bight PTZ Methods and Results



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Snake Bight PTZ Methods and Results



- **Field Validation**
 - Validate greatest number of digitized prop scars as possible

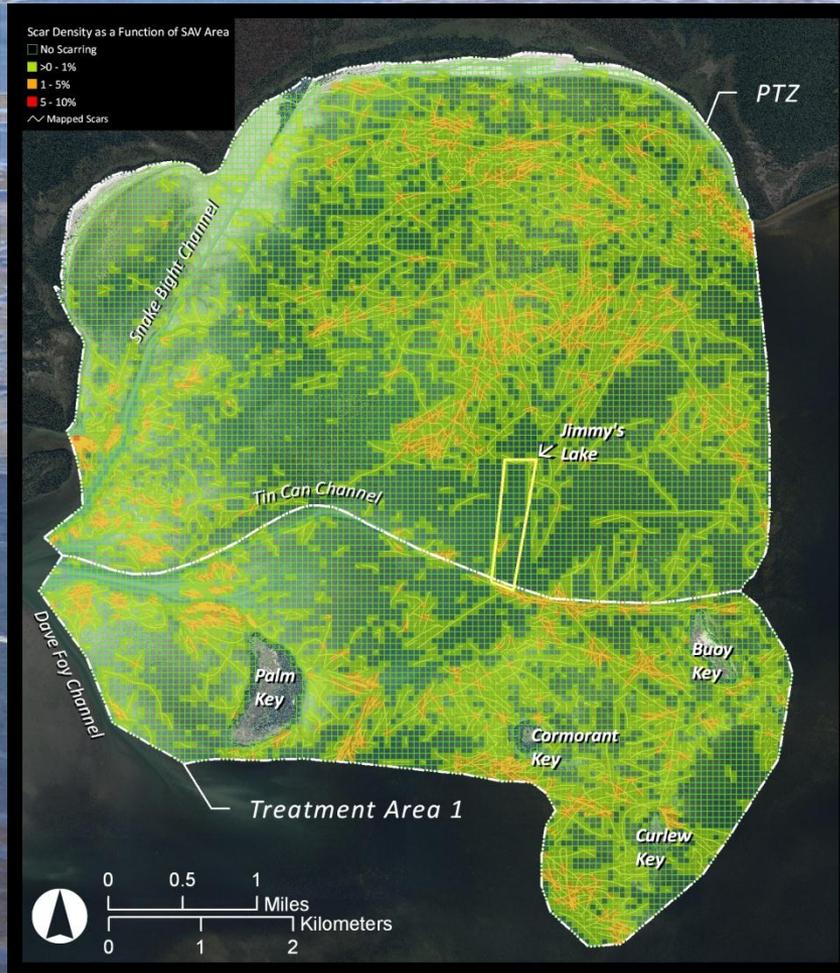
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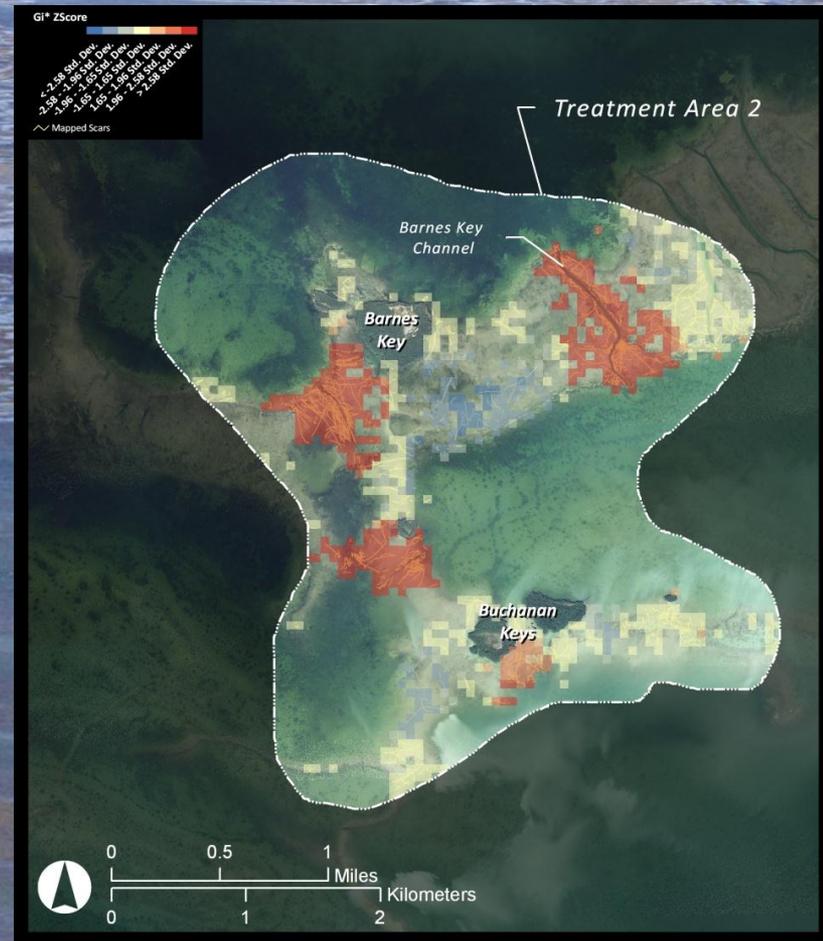
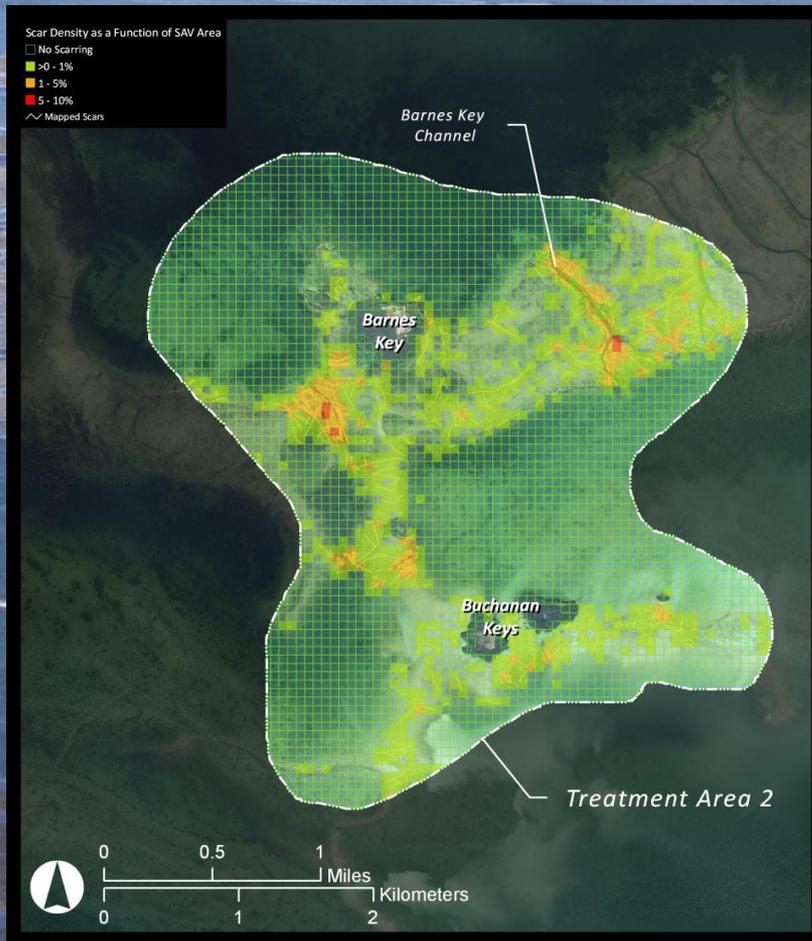


Snake Bight PTZ Methods and Results

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Snake Bight PTZ Methods and Results



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Snake Bight PTZ Methods and Results

In Situ Monitoring

- Collected length (m), scour depth (cm), severity (high vs. low), and surrounding seagrass species at a subset of validated scar locations
- Data collected in 2011 will be compared to data collected during Year 3 (2013) to describe changes in prop scar geometry based on passive restoration



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Snake Bight PTZ Conclusions

- The prop scar data collected within the three project areas will be used to measure the success of the management strategy (i.e., implementation of the PTZ) within Snake Bight over time, as well as changes in the treatment areas.
- Continued public education and law enforcement is instrumental in success and effectiveness of PTZ.
- This project and associated monitoring and ongoing public involvement, will inform future management decisions and strategies for Everglades National Park

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Further questions or comments:

Contact Fred Herling, Everglades National Park

fred_herling@nps.gov

305-242-7704

