

4.29.2004 Meeting

Attendees:

non-FWS: 65 participants

FWS Staff, Merritt Island NWR: Ron Hight, Project Leader; Dorn Whitmore, Public Use Supervisor; Fred Adrian, Forester; Richie Meyers, Refuge Operations Specialist; Vivian Soriero, Biological Technician; & Cheri Ehrhardt, Natural Resource Planner

Values:

What do you value about Mosquito Lagoon?

- Love seeing waterfowl and manatees
- Diversity (Wildlife)
- Access to camping location
- Permit for horseback riding
- Unusual part of Florida, scenic aspect
- Game bird use patterns
- Don't like the out of control anhinga and cormorants
- New bird species attracted to changed impoundments
- One of the greatest fishing areas
- Access from sunrise to sunset, access to fishing (access in and out), and access by multi-boat types
- Access for Titusville residents
- No jet skies
- Important true estuaries (rare), cleanest estuary in Florida
- Recreational activity location
- Historical and natural values (the Refuge offers a unique view of Florida), time machine (gives a glimpse of old Florida), undeveloped area on the East coast, one of the last natural preserved areas
- It's not a landfill, but rather a rare undeveloped environment
- Provides a positive economic impact (guides, hotels, bait shops, and tourists)
- Lagoon standards (control)
- Total experience is more than just fish
- Good water quality and habitat diversity, wintering area for waterfowl (especially for pintail)
- Livelihood, solitude, stress release, and place to relax and view wildlife
- Great opportunity for environmental education
- An important research area
- Permit fees?
- World famous for redfish, breeding area for redfish
- Healthy habitat; important seagrass habitat for shrimp, crabs, and manatees
- Water quality for oysters and clams
- Want a place for our kids

Break-out Groups:

Four break out groups were formed.

Group 1

- Half the group suggested that no access routes or channels are needed through the pole/troll areas.
- The other half of group minus one felt that access routes or channels are needed through pole/troll zones. (See map)
- Everyone thought that education for occasional users of the Lagoon would improve some of the discourteous behavior (e.g., running flat where other boats are fishing).
- A few guides felt that an access route through areas near Vann's Island would impact and disrupt fishing in the Vann's Island area.
- A boat manufacturer expressed the opinion that he heard that prop scarring has a positive side. The scarring produced channels for small crabs and fish to travel through the grass beds. However, everyone else in the group disagreed with him.
- A few guides felt that we should limit the type of boat allowed on the flats, instead of developing no pole zones. Compliance could be ensured through educating all users; allowing a maximum of 90 hp engines; and allowing only flats boats, jon boats, canoes, and kayaks.
- Access channels need to be from 25 feet to 50 feet wide.
- Some felt that all boaters should be charged a fee to use the Lagoon. Since guides pay a fee, all other boater should too. Use a "Mosquito Lagoon Decal" to designate paid users in the Lagoon, with no decal needed for boats only in the Intracoastal Waterway (ICW).
- A fly fishing guide suggested that the entire Lagoon, excluding the ICW, be a pole/troll zone.
- Another person suggested developing pole only zones with no trolling motors allowed.
- A guide suggested that we use a seasonal colored marker to designate water depths. Green (high depth) = OK to run shallows. Red (shallow) = too shallow to run.
- Duck hunters would like to see roll overs installed on the V impoundment dikes at the western edges (to allow for hunter access to these impoundments).
- At the WSEG boat ramp, create a corridor from the ramp where it is ok to come out on plane.
- Once suggestion was to have different rules for different types of boats.
- Ideas included a main channel heading north and south that travels through the middle of flats around popular islands and into and out of Glory Hole. No access should be through the seagrass beds on the south side of Vann's Island nor should access be allowed on the west side of Bird Island.

Group 2

- The delineation of the pole/troll zones should follow the depths of the water or contour lines of the bottoms.
- Do not just stop at Tiger Shoals as a potential site but examine all grassbeds in the Lagoon as potential sites for pole/troll zones.
- Bring the pole/troll zone more to the south, beyond Three Cabbage Island.
- Education is needed to explain the impacts to the grassbeds and the fact that there are seasonal differences in the water levels on the flats.
- FWS personnel should go with experienced boaters to learn the deep water areas and potential locations for channels.
- The channels should be designed to dead-end at which point a boater would begin to pole or troll. They should not be circular in nature.
- For the preliminary mapping of channels and educational purposes, we need more detailed maps.
- Since west of the ICW is a slow speed zone, just enforce that.
- Make all of the area west of ICW a pole/troll zone, not just around the WSEG boat ramp.
- The big problem is scaring the fish.
- Extend the zone all the way to Pardon Island.
- The channels should have plenty of access for bad weather times.
- If Tiger Shoals is the zone, the actual line should be well outside the actual sand bar, in deeper water. There is good fishing for trout in that area near the bar.
- Manatees will use this edge of deep water.
- To mark the zone, use the smallest pipe possible to minimize damage to boats.
- Use 4 inch PVC for the markers.
- Use buoys for marking the zone.
- Establish a heavy fine for violation of the zones.
- Work on the education side with printed maps, web sites, and kiosks.
- Plant mangroves on Bird Island to help reestablish this bird rookery.

SEPARATE ISSUE

- Extend the dock at the Bairs Cove boat ramp so more boats could tie up while waiting to load.

Group 3

- It was unanimous; the entire group supported the pole/troll zone concept as presented. They all felt the running corridors were essential in making the pole/troll zone feasible. There was no consensus regarding the locations of the running corridors. There was consensus that a running corridor into Glory Hole was not needed. Most of the group felt a running corridor should be posted outside the primary zone, maybe making it voluntary. But posting the deep water areas would concentrate use, lessen disturbance to surrounding fishermen, and reduce the random prop scarring.
- The group felt the pole/troll zone should be pulled off the contour line that defines Tiger Shoal and move it some distance into deeper water. The drop off on the edge of Tiger Shoal hold fish and the group felt boaters would run the

boundary and would add boating pressure in a good fishing area. Move the boundary 30 yards or more off the drop-off.

- The group had strong feelings about how the boundary of the pole/troll zone should be posted. Everyone felt we should take a minimal approach toward high profile signs. Instead of the traditional sign post or high profile buoys, the group suggested low profile buoys, similar to crab trap buoys. Some felt that some sign posts would be OK used in conjunction with low profile buoys. Others suggested color codes, like red buoys to define the boundary of the zone with green buoys to delineate the running corridors. Tall posts may be needed to mark the entrance to the running corridors. The tall post may become a safety hazard. Whatever is used should be reflective so they can be seen at night.
- The width and locations of the running lanes was another subject. One suggested that the corridor should be only wide enough for two boats to pass. Some suggested that the running lane should start just north of Pardon Island and continue northward, following a deep water course around Vann's Island. Within the zone, the group felt one running corridor should be enough and the south end should tie into the Vann's Island corridor, continue north around the east side of Bird Island and exit off Tiger Shoal around the goal post marker. Some pointed out that in the winter, fish will concentrate in the deep water proposed as the running corridor. What impact will this have on those fish that depend upon the deep (warmer) water? Maybe the running lane can be moved to one side of the deep water, leaving an undisturbed area for the fish. Others felt that a corridor should be provided from the west to the east channel, but once in the channel the boats should need to begin poling to lessen the disturbance to the fish and other fishermen. It was noted that several in the group like to fish in the locations identified for the running lanes.
- Several individuals in the group felt the pole/troll zone should be expanded. One drew a line that extended the zone along the east side of Mosquito Lagoon south from the proposed zone all the way to Cucumber Island. Another drew a zone on the east side of the Indian River, from just north of the ICW north of Haulover Canal all the way to Turnbull Creek. A third said our zone on the west side of the spoil islands was not extensive enough and suggested that it should extend from just north of Beacon 42 Boat Ramp all the way north to our boundary. Running lanes into the two boat ramps would be enough. An individual pointed out that it is already a slow speed zone and it is only about ¼ mile wide. This would not be a hardship for fishermen, since they could easily pole into or out of this long thin zone and would improve the quality of the fishing in this area.
- Education material at the boat ramps was essential. Things like signs and maps would be necessary. Placing educational material at local fishing shops was also recommended.
- The group felt law enforcement was essential to make the zone work. One person said we could have too much law enforcement. It was recommended that the Refuge conduct undercover operations, just filming the boats violating the zone and after some time has passed, contact the offending boats issuing a citation. The word would soon get out about the low profile law enforcement

operations and this would mean better compliance. At least one person mentioned that the fine should be set high enough to be a deterrent.

- Numerous individuals indicated they would help with:
 - identifying the locations of the corridors,
 - posting, and
 - financing the markers.
- Most of the group indicated the zone should be done now. Don't wait until the CCP is done in two years. They will help. Several questions were asked. What do we need to do? Who do we need to write?
- After the group was informed about anticipated budget cuts in 2005 and 2006, they indicated a willingness to help financially. The group of nine was polled. Would you be willing to pay a reasonable ramp fee? All voted yes.
- Before we broke up, the group felt a watch dog volunteer organization could be established to help educate voters, contact fishermen in violation of the zone, stay at the boat ramps informing fishermen of the zone, and generally help spread the word. The Tamp Bay Watch was used as a model that could be followed.

Group 4

- Within reason, the Refuge is going in the right direction with the poling and trolling areas. Some felt that we should post all of the shallows, while others felt that the posting should be restricted to areas that have some evidence of damage
- The general consensus was that if we don't do something now, we would reach the point where the resource was degraded to the point where use would have to cease.
- Need to determine the carrying capacity of the Lagoon, both for the quality of the experience and to limit damage to resources.
- Need to investigate the long term effects, either positive or negative, of prop scarring
- Pole zones are good, as long as there are sufficient access channels.
 - The guides seemed willing to take Refuge staff out to show where the deeper water through the shoals is located.
- Need to somehow limit the number of people on Lagoon.
- If zones are implemented, the Refuge needs to take into consideration emergency situations. For instance some participants were concerned that if they needed to reach shore quickly when inclement weather threatens, would they be allowed to run at speed through the zones for safety's sake.
- Put user fees in effect \$100/year for general public and \$250/year for guides.
 - This would reduce the number of people.
 - This would provide a chance to educate people about boating ethics, resource needs and damage, and more.
 - These fees could help fund enforcement and education programs.
 - The group came to no real consensus on how to administrate this proposal.
- What sort of consequences would there be for violation of the zones?
 - Obviously there would be fines.
 - Also suggested was loss of privileges for repeat offenders.

- The use of air thrust boats was suggested as a possible way to reduce prop scaring.
- The Refuge needs to provide the public with more information on the Lagoon
 - If users were better educated as to where the shoals are, then they would be able to avoid damage to them.
 - Provide better charts.
 - Take care in marking channels. There was some concern that when we mark the channels that we would cause more damage in those areas.
 - Require users to attend a Refuge fishing program.

5.12.2004 Meeting

Attendees:

non-FWS: 25 participants

FWS Staff, Merritt Island NWR: Ralph Lloyd, Deputy Project Leader; Dorn Whitmore, Public Use Supervisor; Marc Epstein, Refuge Biologist; Vivian Soriero, Biological Technician; & Cheri Ehrhardt, Natural Resource Planner

Values:

What do you value about Mosquito Lagoon?

- Ability to catch redfish and trout
- The fact that it is a refuge, keeping the legacy of Roosevelt alive by providing a refuge for wildlife and diversity
- Lack of growth
- Positive economic impact
- Beauty of the Lagoon
- Stress relief
- Long history and tradition (do not want to see it degraded)
- General recreation (being able to get out some)
- Accessibility for all people
- Lagoon is a breeding and nesting area for fish and wildlife
- Lagoon is a way of life for local population
- Place to be able to socialize (being able to go out in boats)

Break-out Groups:

Three break-out groups were formed.

Group 1

- The focus of Mosquito Lagoon should be the high quality public use opportunities.
- One individual expressed that research is needed to determine the impact of local use of corridors and that this research should not be one-sided. Additional research could involve how long it takes to regenerate sea grasses and whether or not seagrass damage is good or bad.
- All participants felt that education is needed in the form of maps and brochures at boat ramps, boat rental places, offsite ramps, bait and tackle shops, and touring captains' meetings.
- Law enforcement should include a major fine if someone is caught tearing up seagrass beds. Users should be responsible for knowing their own boat's ability.
- Many felt that corridors should be placed in deeper water depths and marked with buoys similar to those used by crab traps.
- Create a pole/troll zone in all shallow areas of Mosquito Lagoon.
- If extend the pole/troll zone to the south, make sure to include access corridors.

- One comment expressed was that pushing for shrimp seems to be doing damage to seagrasses.
- Several touched on the hunt areas and hunt pull overs and that reasonable access is needed. Hunt pull overs should be closer to access corridors.
- The Florida Keys can provide an example, including for access corridors and fines. Mosquito Lagoon should copy the Keys.

Group 2

- The concept of the pole/troll zone that the Refuge has proposed is a good idea, if it can be enforced and if it is well defined. But it is pointless to establish it without adequate enforcement. Another essential ingredient is providing running lanes. When the group was poled if they felt the pole/troll zone was a good idea, it was unanimous: everyone said they support it.
- Peer pressure can be an effective tool in providing enforcement. Anglers should be educating other anglers unaware of the disturbance they are causing by running the flats. Sports anglers and guides can and should commit to making it happen. They can commit in several ways. One, they can provide financial assistance and join an "adopt a buoy" program or form a larger "adopt the Lagoon" program. Anglers could pay \$150 and adopt a buoy which would show their financial commitment. Or, they could speak to boaters groups or spend time at a boat ramp educating boaters of the Lagoon's fishing issues. Peer pressure can be a very effective approach.
- Several in the group voiced opinions that anglers were not prop scarring intentionally. They felt that many of the boaters causing the problem were inexperienced as to the geography of the Lagoon and ignorant of the damage they were doing. Educating boaters is essential to make the pole/troll zone work. Signs explaining the issues and fishing etiquette with maps of the pole/troll zone at all the boat ramps are necessary. Also, the Refuge needs a brochure that fishermen can take with them to reinforce the message delivered at the ramp. One individual felt that guides could play an essential role in helping to educate the public. Make it "educational not confrontational." Fishing clubs could work the boat ramps to help educate.
- Although the group was not poled, most felt the Refuge should expand the zone to a larger area right away. They were concerned that if we don't do it now, it may be harder later. Several expansion areas were proposed. The first would connect to the proposed zone on the east side of the Lagoon and extend to the south to just south of Pardon Island. They said this more closely corresponded to the area where most of the fishing pressure is (based on information presented during the Refuge's PowerPoint presentation). Another suggestion was to extend the zone west of the spoil islands all the way to Haulover Canal. This is currently a slow speed zone. Boaters should not be running in this area anyway. It is a good area, especially for trout. They think that they may start out slow, but once it starts to get shallow or they realize how far it is, they ignore the slow speed zone and jump up and run out. This messes up the fishermen. Besides, it is only about ¼-mile across and easy to pole across.

- The configuration and location of the running lanes was a topic of much discussion. It was the consensus of this group the running lanes should be short. They are intended to get you in and out, but not to run the entire east channel. The running lanes should not go through shallow water, even where there is a short shallow water area between deep areas. We should not sacrifice the shallow zone to accommodate the fishermen who want to run. Some of the best fishing is on the east side. Do not allow users to run everywhere. Within the proposed zone, one person identified a channel from the “shotgun” more or less east, southeast directly to where the hunters could pull over to hunt the impoundments. Connected to this channel, he proposed a north-south channel that went west of Bird Island, hooked around the south side of Vann’s Island and stopped just past the Island. This zone had an entrance or connection to deep water on the south west side. The only running lane for the west zone should be the channels to the boat ramps. This was the only channel drawn by this group.
- Marking the boundary of the zone was another discussion point of the group. Do not use poles. Buoys would be better. We should use color buoys but something other than red and green so they are not confused with channel markers. Adopting a buoy program was again mentioned.
- One individual indicated that the Refuge should stop tournaments now. The discussion that ensued centered on the behavior of tournament fishermen and how it often clashed with sportsman. The group had no suggestion as to how to stop the tournaments.
- Before closing, we discussed paying for materials and implementing the zone. This group did not support ramp fees, nor were they in favor of a Lagoon Stamp. They preferred raising the money through volunteer contributions and through programs like “adopt a buoy”.

Group 3

- Birds no longer using Bird Island may be due to cormorant use. Some users have noticed an increasing number of cormorants using the Lagoon system, which seem to be pushing other birds off nesting habitat.
- All boat ramps on Mosquito Lagoon need marked channels that lead to deep water and to the waterway.
- If we make a poling/trolling only area in Lagoon, this will cause a shift to other areas by fishermen or a high concentration of fishermen in the pole/troll zone.
- Marked corridors mean that the guides are giving up a little inside information but will be better in the end.
- Expect some self-policing of a pole/troll zone by the fishermen. Concerned fishermen will assist with the enforcement by helping report violators of the rules.
- What is the cost of implementing a pole/troll versus having a law enforcement ranger on the water all the time?
- An alternative to the pole/troll zone is to target law enforcement.
- Charge user fees.
- Don’t charge user fees.

- Use a phased approach. Expand this program to other areas if it works or change it if it doesn't work.
- Corridors will attract people and will increase use.
- Deep water areas [e.g., channels] may be harboring manatees.
- It may take 8-10 years for sea grass scars to heal.
- Compared to 10 years ago - a lot more fish now in the lagoon. Why? Because of improved relations, limits on fish size and numbers, and the net ban.
- Catching the same fish over and over [catch and release] must be impacting the fishery.
- Some would like to see a follow up study to determine the number of fisherman in the pole/troll zone in 5 years.
- Safety is an issue. If a boat is deep in the pole/troll area and a storm blows up, how does it get out quickly? Make a north-south inter-channel so boaters can pick up and run out in case of storm.
- In the Florida Keys, the program is working. Self regulation of the system is abundant.
- Need maps of the pole/troll zone at boat ramps to show fishermen and boaters where not to run and to enhance the fishing ethic.
- Anglers will support this program. Fishing associations can provide funds and make donations.
- Mark access areas with buoys and reflective tape.
- Expand the proposed pole/troll area south to T-39. This will help absorb the excess boater traffic wanting to get into the pole/troll area and will not concentrate boaters. Access needs to be worked out.

Summary Comments from Herky Huffman, Commissioner, Florida Fish and Wildlife Conservation Commission

- I support this kind of action 100%. Keep moving forward. You're on the right track.
- Mosquito Lagoon is a magnificent body of water
- Back in the day, you might not see a boat all day. However, the state registered 55,000 new boats last year. We have approximately 965,000 registered boats in Florida with an influx of 400,000 seasonal boats. Over the next 2 years there will be more than 110,000 new boats.
- Do this now! It is past time to do this.
- The Florida Marine Research Institute estimates that it takes 3-10 years for seagrasses to recover and cost about \$32,000/acre to replant seagrasses. Tampa Bay almost lost their grasses.
- Corridors in the Keys were a good idea and have been proven to work.
- I'll take 5 pole/troll boats in an area over 1 boat running in the distance.
- Remember, today new users think they are in paradise. While users from the heyday have given up using Mosquito Lagoon because it is too crowded and too impacted.
- The guides will help make it work.
- Today there is less etiquette in Mosquito Lagoon than in other places in Florida due to crowding.
- Develop a "Buy a Buoy Program" to fund this project.

Written Comments

- “I wholehearted(ly) support the ‘pole/troll’ zone in Mosquito Lagoon and any others that restrict motor-craft in this wonderful wildlife area.”
- Something needs to be done because the flats are not what they used to be and duck hunting as I knew it is gone.
 - Close all flats to outboard use. Allow only pole or troll (electric trolling motor).
 - To gain access to flats, accept damage to areas. Mark waterway channels 50 yards wide from channel to beachside. Mark motor use from 1 to 3-mile intervals, with 10-12 signs in the entire Lagoon.
 - Fine \$500 for damage or operation of outboard in flats areas.
 - Ban all commercial use. No guides. No commercial fishermen.
 - Allow only 10,000 boats per year to fish and/or hunt the Lagoon. Use money from these permits to fund law enforcement, markers,...
 - Impose a daily quota permit from March through August of 120 boats/day.
 - Develop access to duck hunting pull overs. Some of us are too old to pole that far.
 - Varying and seasonal water heights could close waterways and flats to any use at all.
- Add concerns for fish to the list of concerns for Mosquito Lagoon. Fish are being run over and chased day in and day out. Redfish schoolers are spooked and nervous and this cannot be healthy for them. Many fish have prop scars on them and several reds and large trout can be found dead due to prop cuts.
 - Make the entire Mosquito Lagoon a pole/troll area with entrance channels, including the Refuge, Canaveral National Seashore, and Titusville. This will limit the displacement of users who run the flats from one pole/troll zone to other areas.
 - Establish a \$500 fine for boats running an outboard within any pole/troll zone. Three strikes and the boat is auctioned off with the proceeds going to support Refuge and Seashore activities. This would be a real deterrent.
 - Benefits include: less noise pollution, less interruption of animal habitats, bird rookeries would likely see more use, the fish will relax and not get sliced up by props, fishermen will catch more, the seagrasses and bottoms will be safe from damage, and people will have a more positive experience on the water.
 - Don’t give guides special privileges. Under this scenario, guides will be utilized more than ever.
 - Shallow draft boats will be even more important, benefiting the boat manufacturing industry.
 - More people will want to stay overnight and have a good fishing experience, supporting the local hotels and bait shops.
- Create an access fee for non-commercial users (outside of the ICW) of \$25/year.
- If you use 4-inch PVC for markers, consider using colored bands to indicate water depth.
- If you use buoys, use chain instead of line to limit tangling.
- In Tiger Shoals, develop only pole zones, do not include trolling.

- It is very important to preserve the Lagoon as close as possible to its natural state. It is the only natural place remaining between Jacksonville and Miami.
- It would probably reduce the damage to the bottom of the Lagoon if there was a limit to the size of boat allowed to access the Lagoon.
- Proper management of Mosquito Lagoon requires that the entire area be limited to pole and troll, except for the use of power in canals, channels,... to access the flats.
- Designate the Lagoon a no take area.
- Limit the number of boats to the 1990 levels.
- Eliminate bumping of fish.
- Do not allow tournament fishing activities.
- Less manatee idle/slow speed zones! You added too many! Should make them all seasonal.
- Improve Haulover Canal boat ramp. Add additional ramps, parking, cleaning tables, and restrooms!
- Stop NASA from using airboats to patrol/run the whole length of shorelines. This only spooks the fish and birds.
- Cap the number of fishing guides. Allow present established guides, but don't allow any more unless one retires or quits.
- Stop all fishing tournaments!!!
- Open current no motor zone up in Banana River to pole/troll slow speed access to all boats!
- Never catch and release only areas/zones!
- Close the entire Lagoon to motor boats until the grass beds recover completely. After recovery, place maps and notices at the boat ramps. Observe after 2 weeks. If the problems occur, close it again to motorized boats. Close the boat ramps to power boats.
- Are the Feds willing to issue permits similar to Manatee Exempt Permits to allow guides to travel on plane through any established pole/troll zones?
- Have you taken into account that uprooted seagrass re-attaches itself?
- Education is the more favorable route to address the prop scar issue. Lack of skill s and knowledge are doing the damage.
- Do not let the guides control this process, protect the resources for the future and for all the users.
- Develop a pole/troll zone for all or for a substantial portion of Mosquito Lagoon.
- Establish Mosquito Lagoon as a no take zone.
- Investigate the re-introduction of snook to Mosquito Lagoon.
- Eliminate the use of live or dead natural baits. Allow only single hook flies, plugs, or softbaits.
- Charge an impact/user fee for recreational anglers that is equal to that for commercial guides. Use the funds for education, scientific inquiry, capital improvement, personnel, public relations, law enforcement,...
- Conduct a scientific study to assess the carrying capacity and impacts for the Lagoon.
- Consider creating a Mosquito Lagoon Advisory Board with a well balanced, reasonable assemblage.
- The Lagoon should be well marked.

- Users (e.g., anglers, hunters, and others) should be well educated regarding the threats to wildlife and habitat. A certificate of use should be issued only after one has passed an online or other course in the rules and regulations concerning the Lagoon.
- “We want to express our strong support for the plan to restrict motorized (other than trolling motors) propulsion...in Mosquito Lagoon.”
- Do not allow personal watercraft/jet skis.
- The behavior of the professional guide community has deteriorated to sometimes criminal behavior. Guides are blocking the ramps and speeding past fishermen who are already on a flat. Since the guides are out much more often, they are more likely to be causing more damage to the seagrass beds and other resources.
- The guides do not have special rights to these waters and are not more important than the recreational fishermen. We are willing to ban all commercial guides from these waters.