

BISCAYNE NATIONAL PARK FISHERIES MANAGEMENT PLAN WORKING GROUP

DRAFT DOCUMENT: DESIRED FUTURE CONDITIONS (DFC)

ISSUE GROUP 1 – POPULATIONS OF EXPLOITED FISH & SHELLFISH

(1.1-1.3 all combined for DFC)

SUB CATEGORY 1.1 *The abundance and average size of fish (that are subject to take and spend a significant portion of their lives within the Park) relative to those fish in similar fished habitats outside the Park*

SUB CATEGORY 1.2 *Future abundance and average size of fish within the Park (that are subject to take and spend a significant portion of their lives within the Park) relative to current levels*

SUB CATEGORY 1.3 *The long-term abundances of spiny lobster, blue crab, stone crab and pink shrimp within the Park*

DESIRED FUTURE CONDITION

Abundance and size of key / indicator species are increased over a five-year period.

Actions:

1 - Define and monitor key / indicator species

- Bonefish
- Permit
- Tarpon
- Shark spp.
- Snapper spp.
- Grouper spp.
- Snook
- Lobster
- Shrimp
- Crabs (blue and stone)
- Mullet / finger mullet
- Bait species (ballyhoo, pinfish, pilchards, etc.)

2 - Define baselines (current conditions?) utilizing scientific biological sampling of key / indicator species, and dockside surveys that include catch per unit effort (CPUE) and species-specific harvest data (what caught, how many, what size)

3 - Implement restrictions by species in the park

4 - Implement additional restrictions in adjacent state and federal waters

Questions to consider:

1. "Increased" to what extent or compared to what?
2. What would constitute success?
3. What specifically is meant by size?
4. What species do you think are appropriate indicator species (mobile vs. non mobile; heavy fishing mortality vs. low fishing mortality, etc.)?

ISSUE GROUP 2 – COMMERCIAL FISHING ACTIVITY

SUB CATEGORY 2.1 *Numbers of commercial fishers within the Park*

DESIRED FUTURE CONDITION

Limit number of commercial fishers to current levels

Actions

- 1 - Create a transferable license system
- 2 - (?) Create (or better regulate?) gear regulations / standards (need inspections), boat standards (need inspections)
- 3 - Designate fishery specific areas (e.g. shrimp only)
- 4 - Regular, continued users (consistency)
- 5 - Boat standards (need inspects)
- 6 - Enforcement of regulations (SEE CATEGORY 6)

Questions to consider (only if DFC not acceptable):

1. What specifically is it that the group wants to accomplish by limiting entry?
2. What specific impacts are you addressing here?
3. How would success be measured?

SUB CATEGORY 2.2 *Bycatch amount and bycatch-related mortality associated with commercial fishing gear*

DESIRED FUTURE CONDITION

Commercial bycatch is limited to current levels

Actions

- 1 - Limit entry to current levels
- 2 - Gear standards (? more restrictive?)
- 3 - Identify and mark high-bycatch areas (so they can be avoided)

Questions to consider (only if DFC is not acceptable):

1. Limit it to what level or how much?
2. Limit it in what way?
3. How do you measure success in doing this?

ISSUE GROUP 3 NEW- RECREATIONAL FISHING ACTIVITY

Note: This entire Category could possibly be moved under Category 1.

SUB CATEGORY 3.1 *Number of recreational fishers within the Park*

DESIRED FUTURE CONDITION

Limit impacts of recreational fishing

Actions

- 1 - Create limited entry at reduced level (HOW? via permit process?; see Issue Group 6)
- 2 - Reduce or eliminate lobster sport season take
- 3 - Annual permits for locals (limited number)
- 4 - Visitors fishing permits
- 5 - Enforcement of regulations (See Category 6)
- 6 - Eliminate/reduce mini-season take

Questions to consider:

1. One suggestion is "reduce or eliminate lobster sport season take." What is the purpose of this or what does the group hope to accomplish by it? If lobster populations are being sustained under the existing take, why is this viewed as necessary?
2. Limit it to what level or how much?
3. Limit it in what way?
4. How do you measure success in doing this?

SUB CATEGORY 3.2 *Amount and related mortality of bycatch from recreational fishing*

DESIRED FUTURE CONDITION

Limit recreational bycatch

Actions

- 1 - Implement gear regulations (e.g., circle hooks)
- 2 - Reduce bag limits
- 3 - Increase education efforts (e.g., regarding the use of "venting" fish caught from deeper waters)
- 4 - Via limited entry

Questions to consider:

1. What is "recreational bycatch" (need definition)?
2. How would the the park measure how much is occurring?
3. How much do you want to limit it?

4. Limit in what way (i.e. species, amount, locations)?
5. What would be considered success in doing this?

SUB CATEGORY 3.3 *Spearfishing impacts* (Previously under HABITAT category)

DESIRED FUTURE CONDITION

1. Reduce spearfishing harvest of large fish by spearfishers
2. Reduce likelihood of spear related habitat damage.
3. Increase safety of spearfishing gear.

Actions

- 1 - Make BISC “sling-only”
- 2 - Prohibit spearfishing in the bay (coterminous with lobster sanctuary)
- 3 - Prohibit spearfishing entirely in the park
- 4 - Improve educational efforts to raise awareness of spearfishers of their potential ecological impacts

Questions to consider:

- 1.
2. Reduce to what extent or amount?
3. What is the measure of success for each DFC? What do you measure?

ISSUE GROUP 4 HABITAT CONDITIONS

SUB CATEGORY 4.1 *Impacts from roller-frame trawling*

DESIRED FUTURE CONDITIONS

1. Improve knowledge of effects of trawling on bottom communities and habitats.
2. Current fleet in good working condition; rollers cannot be or are not modified to drag the bottom.
3. Capability of regulations based on documented research

Actions

- 1 - Perform studies to improve knowledge of effects of roller trawls. Perform studies to determine if gear modifications should be made to reduce physical or ecological impacts of trawling
- 2 - Establish Research Natural Area (RNA) expressly set up to provide a “control” area where roller-frame trawls are prohibited (but allowed in rest of park). Open RNA if science shows no difference
- 3 - Ensure current fleet is in good working condition (rollers on trawl are functional). Better design rollers (INSPECT!) or somehow ensure rollers can't be jerry-rigged with wires to drag on bottom (or modified)

2. Questions to consider:

1. How will success be measured for each objective?

SUB CATEGORY 4.2 and 4.3 (newly combined) *Frequency of derelict spiny lobster and crab traps and trap debris on benthic habitats and Frequency of lost or discarded hook and line fishing gear*

DESIRED FUTURE CONDITION

Reduce densities and of ghost traps and unsightly dangerous monofilament/lines/ropes below current levels. (result: pleasant visual experience underwater (natural diving))

Actions

- 1 - Perform cleanups during closed seasons; establish a closed season for blue crabs
- 2 - Establish volunteer clean-up programs. Involve: students, conservation groups, divers, community groups
- 3 - Design traps with side entry or gear that does not trap permanently (*use the patented MOE™ design; although there was a comment that-side-entry traps don't work with lobster)
- 4 - Establish bounty for found traps (legal ramifications?)
- 5 - Place discard receptacles at boat entries (for monofilament?)

- 6 - Synthesize, disseminate and better use already known information (i.e. Berkeley et al. study 1985, state / FWC information)
- 7 - Increase efforts to educate public re: effects of lost / discarded line

Questions to consider:

- 1.
2. What would constitute success and how would it be measured?
3. How much would you reduce below current levels?

SUB CATEGORY 4.4 *Habitat impacts (e.g., broken, injured and over-turned coral) due to lobster divers*

DESIRED FUTURE CONDITIONS

1. Reduce/eliminate human impacts on habitat during lobster sport season
2. Users are aware of regulations and user's potential impacts on habitat

Actions

- 1 - Schedule reef clean-up day (with volunteers) right after mini-season, or
- 2 - Prohibit mini-season in Biscayne National Park, just like Pennecamp
- 3 - Include rules in information given to crawfish/lobster stamp recipients
- 4 - Set heavier fines for anchoring on corals
- 5 - Provide more anchoring buoys, but spread out so they're not concentrating effort

Questions to consider:

1. Specifically what types of human impacts are of concern?
2. Reduce by how much? Below current levels?
3. Which specific regulations need more awareness by users?
4. How would success be measured for both DFCs?

ISSUE GROUP 5 RECREATIONAL FISHING EXPERIENCE

(5.1-5.2 combined for DFC, 5.3 and 5.4 moved to Category 6 Law Enforcement)

SUB CATEGORY 5.1 *Quality of experience of Park visitors engaged in recreational fishing*

SUB CATEGORY 5.2 *The portion of flats fishers experiencing a “private and tranquil” experience*

Small Group said they could not draft DFC because everyone’s experience on the water is different and how one evaluates a good experience is subjective.

DESIRED FUTURE CONDITION

None was identified. The quandary was that this is very subjective.

Actions

- 1 - Collect baseline data on (1) what is required for a “quality” experience and (2) what proportion of fishers are having a quality experience
- 2 - (?) Provide a feedback critique system for BNP fishermen and fisherladies

Questions to consider

1. Do you want to keep this Category? Is it meaningful to a fisheries management plan?
2. How would you survey to find out about visitor’s experience?

ISSUE GROUP 6: LAW ENFORCEMENT, EDUCATION AND COORDINATION

DESIRED FUTURE CONDITIONS

1. Park rules and regulations are enforced effectively and uniformly.
2. Increase funding for and number of law enforcement officers over current levels.
3. Education and outreach efforts have fostered voluntary protection of Park resources by building support for rules and regulations and responsible behavior on the water.

Note: Education and enforcement are key components to making the entire plan work. To accomplish we need to establish a funding structure.

Actions

1. Establish a permit system for fishing within BNP. Under the permit system:
 - a. Permit is for fishing from land or from water
 - b. Purchasers of permit required to view 1-hour informative video on rules and regulations pertaining to fishing and boating within Park
 - c. Permit holders that fish from boat put sticker on boat; can obtain more than one sticker per permit if can document owning multiple boats
 - d. Differentiate between locals and visitors
 - e. Coordinate efforts with ENP and Florida Keys National Marine Sanctuary (BNP should develop a relationship with Florida FWCC in which these funds fund FWCC enforcement officers operating in BNP).
 - f. Funding generated by permit earmarked solely for enforcement and education.
2. Education [concerning both (1) rules and regulations and (2) importance of being an ecologically-responsible park user]
 - a. Place signage and materials in English/Spanish/Creole at all public access ramps and fuel docks leading to BNP explaining all fishing and general regulations pertaining to all vessels using Park waters
 - b. Coordinate with appropriate media outlets to disseminate rules and regulations
 - c. Education at all school levels, clubs, vendors, etc.
 - d. Earmark 10% of collected funds to community outreach programs to reach youth
3. Enforcement of Rules and Regulations
 - a. FWCC officers should be cross-deputized to enforce federal and state regulations in BNP
 - b. Establish and enforce strict penalties for all violations, particularly for repeat offenders

- c. Devise and utilize creative law enforcement approaches
- d. Stricter penalties for violations; violations enforced (particularly with repeat offenders)

Questions to consider:

DFC #1: Park rules and regulations are enforced effectively and uniformly.

1. How do you determine "effectiveness" and/or "uniformness" of enforcement?
2. Is this actually the "desired condition" or would a better statement be something like "Violations of park fishing regulations do not frequently occur" and it is by effectively and uniformly enforcing regulations (along with perhaps some other things) that this desired condition is achieved? (measurable standard of success might be something like "less than "x" observed violations / citations per month occur?")

DFC #2: There is adequate funding for law enforcement officers.

1. How would this be measured or determined? Perhaps change to "Increase funding for and number of law enforcement officers over current levels", which is very measurable.

DFC #3: Education and outreach efforts have fostered voluntary protection of Park resources by building support for rules and regulations and responsible behavior on the water.

1. How is it determined if there is adequate "support" and when it was achieved?
