



Florida Fish and Wildlife Conservation Commission

## Snook Workgroup Meeting #1

July 25, 2006

8:00 am to 5:00 pm

Four Points by Sheraton, Chateau Elan  
Sebring, FL

### REPORT OF PROCEEDINGS

#### WELCOME

The meeting was opened by William Teehan, Biological Administrator III, Division of Marine Fisheries Management, Florida Fish and Wildlife Conservation Commission, who welcomed everyone and thanked them for their enthusiasm and willingness to assist in this effort.

Mr. Teehan introduced staff and the facilitator to the members, then turned the meeting over to the Facilitator, Janice Fleischer, FLASH Resolutions.

All Reports of Proceedings of the Committee, Discussion and Public Guidelines and Committee related information, can be found on the FWC website at <http://myfwc.com/marine/workgroups/index.html>

#### Members in attendance:

Tom Fraser - Ft Myers  
Howard Wells - Sarasota, Coastal Conservation Association West Coast  
Sue Cocking - Miami Herald, Journalist  
Frank Sargent - Tampa, Journalist  
Byron Stout - Ft. Myers, Journalist  
Jason Schratwieser - International Game Fish Association  
Rick Grasset - Sarasota, Guide  
Sawyer Smith - Ft. Myers, Tournaments  
Ron Riley - Ft. Myers, Tournaments  
Richard Grathwohl - Florida Keys, Florida Guides Association (FGA)  
Pat Kelly - West Coast, FGA  
Danny Guarino - Tampa, FGA, Guide  
Rick Roberts - Snook Foundation Director  
Wade Thompson - Bradenton, Tournaments  
Butch Constable - Jupiter, FGA, Guide  
Mike Kennedy - Jupiter, CCA, East Coast  
Tom Twyford - West Palm Beach Fishing Club  
Ted Forsgren - Statewide, CCA  
Curtis Bostick - Marco Island, CCA

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Workgroup members not in attendance:

Brian Liem  
Ken Leber (alternate - Rick Roberts)  
Dave Markett (alternate - Danny Guarino)  
Gary Borland  
Roger Birt

FWC Staff in attendance:

William Teehan, Division of Marine Fisheries Management (DMFM)  
Jessica McCawley, DMFM  
Jasmine MacPherson, DMFM  
Mike Murphy, Fish and Wildlife Research Institute (FWRI)  
Ron Taylor, FWRI  
Jim Colvo, FWRI

There was one Observer in the audience.

## **AGENDA REVIEW**

Ms. Fleischer introduced herself to the members of the Workgroup and gave a quick overview of her background (see [www.flashresolutions.com](http://www.flashresolutions.com)). She then directed members to their meeting packets and reviewed the contents; then quickly reviewed the Agenda for the day's activities (**Exhibit A**). She explained that, since this was the Workgroup's first meeting, the content would be a combination of procedural and substantive discussions and decisions.

## **WORKGROUP INTRODUCTIONS**

As an icebreaker, Ms. Fleischer asked each member to introduce him/herself and tell one personal interesting thing about themselves. While some members talked about non-fishing subjects, most concentrated on their experience and knowledge of the snook fishery.

## **FWC OPENING PRESENTATION**

Following the Workgroup Introductions, Florida Fish and Wildlife Conservation Commission (FWC) staff delivered two presentations to both provide valuable information to the group and to explain the history and reason for the establishment of the Workgroup.

Mike Murphy, FWRI assessment biologist, delivered the first presentation (**Exhibit B**). During his presentation and at its conclusion, members asked the following questions and made the following comments:

1. Are illegal takes calculated in data
2. Does number of intercepts effect data
3. Undersized
4. What is creel
5. Please explain the bars on graphs
6. What is statistical consideration for fudge factor
7. Intended for long term trend
8. Lie factor will affect data

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9. Not doing standard deviations
10. How is sampling done - random sampling
11. Why catch more fish per set on Atlantic than gulf
12. How choose where your going to place net
  - a. Random sampling
13. Creel - do census on off season
  - a. All year sampling
14. Haul seine samples south of Marco?
  - a. Yes
15. Describe fishing limitations of haul seine
16. Was drop in 2004 (gulf) because of red tide
  - a. No there were other factors as well
17. What is fishing mortality
  - a. Harvested or died after release
  - b. Mortality based on creel survey
18. What is .18 fishing mortality
  - a. Instantaneous rate
19. We still don't know how old snook get
  - a. Yes we do
20. Is there a chance that SPR will hit 40% and stay there (pg 15)
21. Why do we have only a one year snapshot 94-95 (pg 19)
22. Can we assume decline in mangroves
23. Are we looking at all mangroves (red? black?)
24. Is there a way to estimate/ graph how the number of fish aggregate/ what the potential of spawn is vs. Success

Jessica McCawley, DMFM biologist, delivered the second FWC presentation (**Exhibit C**).  
 Following Ms. McCawley's presentation, members commented:

1. Weight and length of biggest fish will really depend on where you are when catching
2. State record might have been a 48" fish
3. Scales really vary; some not accurate
4. What does peaking in 2004, is that because that is the last year you had data?
  - a. Yes
5. Trip numbers come from creel survey
  - a. Includes phone surveys as well
6. If snook is 4<sup>th</sup> most targeted fished fish, what is the first?
  - a. Red drum was first
  - b. Spotted sea trout
  - c. Grouper (gulf)
7. This is statewide
8. If snook is the 4<sup>th</sup> most targeted fish, then this really puts a pressure on fish populations
  - a. in survey even if snook not the only fish being targeted but one of several, it is counted
9. What is the % you are applying to release mortality? (2.13%)
10. We need to re-evaluate how these estimates are made; this may be one issue we need to look at
11. The mortality is worse case scenario which is not really a fair estimate
12. Sometimes fish die later so you don't see damage right away
13. A net called a "swim in" net/ cradle net, keeps fish horizontal

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14. Found mature spawning females as little as 14 inches
15. If you are over 65 you don't need a fishing license therefore you don't need a snook permit
16. We need to raise the cost of the snook permit (issue)
  - a. This is legislative, however, if you all make this recommendation, the agency can go to the leg; in the purview of the agency
  - b. You can go to the leg yourself, but you can recommend this to us as well
  - c. The leg needs to see that the industry/stakeholders support that

At this point in the meeting, the members took a short break

## TASKS, PROCEDURES AND POLICIES

Upon returning from their break, the Facilitator began the process of having the Workgroup begin to develop their own governance structure. To begin the process, she acknowledged that some members may not be familiar with a facilitated process. She outlined the responsibilities she would have as a Facilitator (Exhibit D) and noted that, by being part of the Workgroup; the members had certain responsibilities as well (Exhibit E). She explained that large groups have many ways of making decisions (Exhibit F) and that this Workgroup would be using a collaborative consensus based model. She then explained the process for consensus ranking: for each decision the group is asked to make, rather than voting, the group would be asked to exhibit their level of agreement by a show of fingers- 5 fingers means wholehearted support, 4 fingers means support, 3 fingers means you are neutral but will support fully to outside world; 2 fingers means you still have questions you need to ask and 1 finger blocks any decision. Consensus is defined as everyone having no less than 3 fingers showing during a ranking. Voting will only be used if consensus cannot be reached in a reasonable amount of time.

Ms. Fleischer then had the group adopt their Quorum and Consensus Rules (Exhibit G) and Meeting Guidelines (Exhibit H). She introduced the Public Comment Guidelines (Exhibit I) and the presented the FWC suggested Governance Rules:

1. Representatives have been chosen on an individual basis; therefore there will be no alternates. If a member is absent, no other person may sit at the table for him/her.
2. Only one meeting may be missed by a member.
3. Participants are expected to arrive on time so that meetings can begin and end on time.

Discussion ensued concerning missed meetings and alternates, and it was decided to change the rules to allow alternates, thereby making missed meetings an unnecessary rule. However, if a Workgroup member is going to designate an official alternate, it must be done in writing to Jessica McCawley ([jessica.mccawley@myfwc.com](mailto:jessica.mccawley@myfwc.com)) at least one week before the first meeting that member will miss. Only one designated alternate is allowed per member. (Exhibit J)

Ms. Fleischer ended the procedural portion of the meeting by explaining the use of the comment cards that would be provided to both members and observers at every meeting. These cards are for the purpose of allowing Workgroup members and the public to make individual comments on any subject relative to the work of the Snook Workgroup and have those comments included in the Report of Proceeding for that meeting. Comments may be made anonymously if desired, but if the commenter puts his/her name on the card that will appear in the Report. Comments

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can be turned in at the meeting or submitted in writing by emailing the Facilitator; Janice Fleischer ([janice@flashresolutions.com](mailto:janice@flashresolutions.com)) within the first week following the meeting.

## SUNSHINE LAW PRESENTATION

Not done at this meeting, will be presented at the next meeting. (Handout, **Exhibit K**)

## ISSUE GENERATION AND CATEGORIZATION

To begin the substantive portion of the day, the Facilitator introduced the Workgroup to an exercise designed to generate a list of issues surrounding the topic of the Snook Fishery. She explained that each member would be provided with a "post it" pad and a pen for writing. Initially, this exercise would be done individually, with no conversation among members, just individual brainstorming. She defined an issue as "a point or matter of discussion, debate or dispute" and asked the members to write one issue per post it note sheet. Observers were invited to join in this exercise as well and were given a different color post it pad. People could write as many issues as they could think of with no thought (at this point) to resolving them or feasibility of the FWC addressing them. The FWC posed three areas where they particularly wanted to have issues generated, but any other areas of concern to the Snook Fishery were open without limitation. The three areas designated for addressing were: 40% SPR/what type of fishery do you want; coast specific concerns; and licensing issues.

Once the group finished writing, they were asked to come up and read the notes of their colleagues and see if that inspired them to add any more ideas. When everyone indicated they had no more to add, members were asked to work with their colleagues and put the issues together into "affinity" groupings. These groupings were then named with the assistance of the Facilitator in guiding the discussion.

The results of this exercise are shown below.

### **Red indicates comment by observer**

#### LICENSING ISSUES

- Number of new residents targeting snook
- Require snook permits of all who angle for snook no matter their age or shore/wade/pier
- License everyone
- Land based exemptions
- Require license for shore/structure fishing unless on welfare
- No exemptions for fisherman (few exceptions)
- Law enforcement is not connect so not well funded
- Assess a reasonable snook fee with split of proceeds to hatchery and habitat enhancement
- Raise price of snook stamp [permit]
- Failure to estimate actual users of fishery
- Too low a value on snook permit
- Change snook permit fee-make it higher (\$20.00 year)
- Raise snook permit fee

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- Raise license fee
- License and permit fees
- License all saltwater anglers
- No exemptions, age, land, etc.
- Shore based snook anglers should be required to have a license
- Clarify rules (language) a snook permit is not only a license to kill but a license to carry
- Raising the price of snook stamp to target funds for research and management of snook through a comprehensive research and development program
- Limit discussion to topics FWC can deal with (licensing excepted)
- Take permit cost increase
- Trophy kill fee
- Increase snook stamp fee; money used for habitat restoration
- Must consider low socio-economic group and access to fishing

#### ENFORCEMENT

- FWC law enforcement officers underpaid; causing inconsistencies in snook regulation/law enforcement
- Snook poaching
- Anti-poaching enforcement
- Poaching
- Lack of enforcement
- Increase and improve enforcement
- How big a factor is poaching in total catch
- Enforcement resources
- Anti-poaching education

#### 40% SPR/WHAT TYPE OF FISHERY DO YOU WANT?

- Is the 40% SPR target based on a scientific projection-US 38%
- Stocks on both coasts need to be increased to 40% SPR
- Mortality rate not accurate-inflated
- Not enough fish
- Dolphin kill of fresh released fish
- Release mortality-39% wasted
- SPR provide predictive models of ALL variables (closures, size, bag limits) that will achieve 40%
- More big fish
- More closed season?
- Localized regulations and closures
- Circle hooks lower mortality
- Guidelines education by Ron Taylor's group on fish handling
- Too few fishing slot sizes
- Limit summer time fishing to areas outside passes on new: full moon
- Barbless circle hooks for all live bait fishing for snook
- The SPR on both coasts needs to be raised to 40%
- Increase in minimum size while keeping max size the same
- Mandate limited dredge of feeder creeks; designed dredging works
- Is 40% SPR possible with current state of habitat in SE Florida
- Update 2005 snook stock assessment with 2005 data

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- Size slot to be re assessed
- Adjust slot limit more?
- One fish limit may closure statewide
- Red tide mortality
- Existing rule is failing to meet minimum goal of 40% SPR
- 40% is this number still valid; can we tighten margin of error on this number?
- One fish east coast
- One fish on east coast
- Release mortality (observer)

#### RESEARCH AND MONITORING

- Information network among guides
- Research funding
- Snook stock assessment to include Bahamas where no protection exists
- Do any of the models contemplate loss of habitat
- Inadequate fisheries dependent data
- Tournament fishing impact
- Allow exemptions for tournament anglers to carry snook out of season if FWC is involved in research
- Give tournaments exemptions for possession limits; closed season; size, etc. if research oriented tournament/education oriented, etc.
- Accuracy of catch and release mortality figures (digital cameras) (observer)

#### COAST SPECIFIC CONCERNS

- Need to manage on a more regional basis
- Snook issue vary in different regional of state
- Should Tampa Estuary and Charlotte Harbor be two different management areas?
- Lack of big snook being caught on west coast (observer)

#### WATER QUALITY/HABITAT

- Water quality (Facilitator note: there were several of these)
- Reduce water release from spillways
- Lake Okechobee
- Loss of wetlands due to development and need to restore shorelines which would hold juvenile snook
- Snook stocking as needed
- Influence of water quality flowing from Lake Okechobee which impacts both west and east coasts
- Poor water quality
- Water quality and timing of flows into Florida Bay through Shark River Slough and Taylor Slough
- Okeechobee runoff
- Impacts due to non native fish stocks such as Oscars
- Impact of mosquito spraying on spawning and stock snook
- Better monitoring (if any) of mosquito spraying of mangroves
- Water quality of nearshore habitat (non-point pollution and red tide)
- Red tide mortality factored in?
- Reevaluate red tide mortality

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- Address red tide issue
- East coast beach restoration
- Beach dredging
- Red tide impacts
- Management plans should consider loss of mangroves, the east lost more and had less to begin with
- Recruitment impact from red tide
- Fishery management plans to consider localized situation, i.e. lack of habitat
- Habitat loss
- East Coast fisheries limited by loss of essential fish habitat
- Loss of mangrove habitat
- Lack of habitat
- Stop mangrove destruction
- East coast habitat loss
- Southeast coast habitat degradation and loss

#### STOCK ENHANCEMENT

- Snook hatchery in Southwest Florida-Lee County
- Snook stocking
- Stock enhancement
- Why does FWC not have a viable snook hatchery
- Would restocking work in case of cold event, massive die-off from red tide, etc.

#### RESEARCH AND EDUCATION

- For hire client expectation education
- Education of public about snook
- Porpoise predation on snook release
- **Improper handling**
- More education of all fisherman
- **Angler education**
- Work on better education to general public
- Are there any effective means to reduce release mortality
- Fishing procedure
- Release mortality education
- Use the tourism council for education awareness, etc.
- Single hook, barbless hook
- Reevaluate release mortality rate
- How to curb release mortality
- Longer Term: release mortality study (+2 days)
- Poor catch and release ethnic
- Post release survival poorly understood for different types of gear

#### UNCATEGORIZED ISSUES

- Excess boat operation on flats
- Salt water fishing is larger than fresh water does staffing reflect this?
- Manatees
- Manatee/idle zone expansion is driving anglers away from waterways and Florida
- Provide the scientists for the state with the money and resources they need

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- Examine complete closure of fishery for several years
- Should you be able to weigh a potential world-record snook on land
- Suggestions for prohibition on use of live bait?

The group then took a break for lunch.

## PLENARY DISCUSSION RE: ISSUES

Prior to breaking the group into small workgroups for the next exercise, the Facilitator asked the members for their comments and reactions to what was produced on the “post it” notes and the affinity groupings created with them. Members had the following to say:

1. Some items listed cannot be addressed by the FWC, e.g. habitat loss
2. There may be room for improvement
3. Disagree with #1; other states have cooperative agreements between F&W and environmental agencies
4. 1200 a day moving to FL, and more education similar to what you would get for a boating license. Need for more education. Ron Taylor has written many articles about this.
5. FWC needs to look into habitat restoration
6. Important to focus in on a measurable biological goal, e.g. manatees. Determine what a healthy herd is.
7. Because FWC cannot address things, the FWRI has an important research arm that could study the issue and money could be spent on these issues such as habitat
8. Disconnect between habitat and wildlife management in FWC strategic plan to cooperate with other agencies to accomplish these goals
9. Under the new FWC mission statement it states that habitat protection is included; it is time that maybe there is a shift, i.e.- ecosystem based management
10. FMPs have a section on EFH and this should be expanded as part of this cooperative effort and this is an East coast issue
11. Enforcement is likely the largest problem in the snook fishery
12. To achieve the 40%, could limit the nights when snook are spawning, by closing the passes during the full moon to fishing during the summer
13. Enforcing #12 would be very difficult to enforce
14. #12 could identify areas where snook could be found
15. 40% - important to know that when it was passed by the Commission, the goal was – 40% or better, not less than 40%. Therefore there should be a buffer above 40%.
16. An unfished fishery should have a 100% SPR
17. Tom Fraser has historical knowledge because he was a former Commissioner
18. Is 40% ever achievable?
19. What is the SPR of fish that are lower in popularity?
  - a. 30-35%
20. At the time the 40% was established the actual was 23-26% but wanted to get to 40%
21. At the time snook was given the highest SPR was in order to have lots more big fish and game fish
22. Fishing for snook with live bait and use of circle hooks (barbless) then could be a management option
23. Inexpensive resources available to people who want to use them, e.g. tournament sampling

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24. Live bait with a circle hook with no barbs makes all the bait swim off
25. If habitat exists then stock enhancement could be an option

## SMALL GROUP INSTRUCTIONS AND SMALL GROUP BREAKOUTS

Ms. Fleischer explained the next exercise would be to have the members break into small groups working together to further refine the groupings and begin to develop Goal Statements and Objectives. Members were given a definitions page (Exhibit L) and Small Group Instructions (Exhibit M).

There were three (3) small groups that worked for approximately 1.5 hours before reporting out.

## PUBLIC COMMENT

At each day of meeting, there will be opportunities for public comment. In the morning of this meeting, the public was invited to take part in the generation of issues in lieu of public comment. Upon invitation to comment, no one commented.

Members of the public are encouraged to submit their comments in writing on the comment cards provided at each meeting or email the Facilitator; Janice Fleischer ([janice@flashresolutions.com](mailto:janice@flashresolutions.com)) within the first week following the meeting and those comments will be included in the Report.

## SMALL GROUP REPORTS

At the conclusion of the time period for small group work, each group reported to all members what they had accomplished. What appears below is a transcript of the work of the group as reported followed by the reactions of those Workgroup members not in that small group.

**Group 1:** Ted Forsgren, Tom Fraser, Jason Schratwieser, Sue Cocking, Rick Roberts, Sawyer Smith, Byron Stout

### **GOAL: THERE SHOULD BE A MINIMUM GOAL OF 40% SPR**

1. Precursor: Look at management alternatives, modeling, traditional and non-traditional
  - a. Slot size
  - b. Closed season
  - c. Bag limit to include boat limit
2. Accuracy of SPR and Modeling should be peer reviewed
  - a. Ex: review methodology of research-MRFSS
  - b. Increase sample sizes relative to snook
3. Request peer review of modeling procedures

**GOAL: RESEARCH AND MONITORING** (Facilitator's note: this was not revised to reflect a goal statement by the group)

1. Exploit these items further:

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- a. Utilize tournaments for research
- b. Require guides to have log books
2. Look into tagging to quantify survival of adults
  - a. Validate catch rates
3. Improve fisheries independent monitoring with snook specific gear and methodologies

Comments from members following Group 1 Report:

1. In Everglades in their Creel survey the guides must turn in their sheets and survey done
2. Greater usage of tagging snook in tournaments
3. Tags are "not nice" to fish, you need to know what tagging does to a fish; barb tags are nasty
  - a. Genetic tagging is best
4. How much more information could be captured by tagging since we have already been doing it so long
5. Ongoing program might validate other data (accuracy)
6. Cost benefit analysis
7. Great idea for guides to keep log books
8. Can the log book be web based
9. Makes sense that guides would network and get the information on how many fish killed and other information
10. Model shows more fish being killed than we think is happening in reality
11. East coast is only two months and needs to be taken into consideration; west coast is four month
12. We need to share information to make this better
13. Two concerns of tournament fishing and impacts; number of tournaments and element of type of folks coming that impact fisheries and their environment
14. Is fish being transported in live well then released; what is this impact
15. Should we regulate numbers of tournaments; one thing is also pressure on fish and boat ramps

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**Group 2:** Richard Grathwohl, Ron Riley, Howard Wells, Frank Sargeant

**GOALS: ENFORCEMENT**

1. TO CONTROL OR ELIMINATE POACHING
  - a. OBJECTIVES:
    - i. Identify poaching areas with snook experts
    - ii. Sting operation encouragement
    - iii. Task force to flood areas
    - iv. Presence on land and water
2. INCREASE EDUCATION IN FISH LAWS AND ETHICS
  - a. OBJECTIVES:
    - i. Cut waterfront property owners poaching
    - ii. Cut land based poaching
    - iii. Produce angling ethics fliers
      1. e.g. queen conch
    - iv. Angling ethics print promos

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**GOALS: LICENSING ISSUES**

- 1 INCREASE FUNDING FOR RESEARCH, EDUCATION AND ENFORCEMENT
  - a. OBJECTIVES
    - i. Double or better the funds
    - ii. Snook permit increase to \$5.00
2. INCREASE NUMBER OF PERMIT BUYERS
3. ELIMINATE SHORE FISHING EXEMPTIONS

Comments from members following Group 2 Report:

1. Law enforcement; we can't keep them around, we lose really good folks, they move to other departments due to income; we must be able to pay our law enforcement officers to keep them
2. ongoing problem with blatant gill netting; then we got a 3<sup>rd</sup> degree felony for illegal netting; we need to look at what the consequences are if you are caught, higher penalties needed
3. Law enforcement issues are really tough to prosecute; need a liaison in training of prosecutors
4. Don't take away the right to fish of poor; financial affidavit to issue an exemption permit: sustenance fishing
5. Powerful lobby on cane pole fishing
6. Poaching is done by folks that live on water; retirees that go fishing
7. Can we have a "pay by kill" permit? i.e. you pay for each fish you kill
8. What about special forces to do just what is (Sentence left incomplete by group)

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**Group 3:** Mike Kennedy, Tom Twyford, Wade Thompson, Danny Guarino, Butch Constable, Pat Kelley, Rick Grasset

- 1 GOAL: DETERMINE STOCK ENHANCEMENT VIABILITY
  - a. Scientific viability
    - i. Technology to respond to die off
    - ii. relocate
  - b. Funding : economics and feasibility
- 2 GOAL: OUTREACH AND EDUCATION OF RELEASE MORTALITY
  - a. Release mortality
    - i. Type to research
    - ii. Accuracy
      1. long term studies
      2. bottlenose dolphin
    - iii. 2.13% release mortality rate
  - b. Public education to curb release mortality
    - i. Boga(?)/handling
    - ii. Circle hooks
    - iii. Barbless
    - iv. Bottlenose porpoise/can't read next entry
    - v. Guides teaching anglers
  - c. outreach program to change public perceptions from harvest fishing to trophy/sport fishing
  - d. GOAL: alter expectation levels

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- 3 GOAL: IMPROVING THE FISHERY BY MANAGING THE ESTUARIES GEOGRAPHICALLY
- a. *Primarily the same issues, just different state of distress and priority approaches to resolution*
  - b. EAST:
    - i. *Habitat:*
      - 1. *loss and degradation*
      - 2. *beach renourish/dredge*
        - a. *covers rocks*
        - b. *enters inlets*
        - c. *destroys grass*
      - 3. *poaching- spears*
      - 4. *Okeechobee run off*
    - ii. *Need to investigate or identify different fisheries on coast vs. "Atlantic Coast"*
      - 1. *Does the East coast fishery need to be subdivided for management purposes*
        - a. *if so, where is the line*
        - b. *ref: one mile north of the Stewart/St Lucie inlet*
  - c. WEST:
    - i. *Beach renourishment/dredging*
    - ii. *Red Tide*
      - 1. *recruitment*
      - 2. *other-bait*
    - iii. *poaching/nets*
    - iv. *Okeechobee runoff*
    - v. *Should Tampa Bay estuary and Charlotte Harbor be managed separately*
    - vi. *"big fish" missing*
    - vii. *"big fish" marine habitat enhancement*
- 4 GOAL: INCREASE THE SPR BY IMPROVING HABITAT AND WATER QUALITY
- a. *Okeechobee runoff/fresh water discharges*
  - b. *Mosquito spray-impact*
  - c. *Mosquito impoundments-east coast*
  - d. *Beach dredging*
  - e. *Red tide*
  - f. *Mangrove/seagrass/oyster*
  - g. *Non-native fish*
  - h. *Question: habitat story(?) to fund restoration*

Comments from members following Group 3 Report:

1. The east and west coast are two different very distinct system; more habitat more snook effort
2. It is hard to lump the entire habitat together
3. With regard to stock enhancement; this is happening all over the world, if you allow big snook alive in nature they would probably make more babies than in a hatchery
4. There is nature and the fishery at Mote Marine which seems to be successful (Kevan Main, Ph.D. research team Mote Marine)
5. Potential for having fish spawn in captivity

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6. Mortality rates are different on the west and east coast; east coast have a better survival rate since they are bigger
7. No mention of mosquito impoundments; do you think they are working
8. A mosquito impoundment is marshland with a culvert; they are allowing little fish to go through; this creates a nursery
9. Snook larvae need mosquito larvae to survive
10. don't agree with big vs large fish; if you handle them right before you release them the mortality is the same
11. The water temperature is more important
12. Poaching is really a problem; along with off docks, bridges, etc.

## **EVALUATIONS/ANNOUNCEMENTS/NEXT STEPS**

Members were asked to complete their meeting Evaluations and turn them in. The Facilitator thanked everyone for their hard work and patience during this first long day of procedure and substance.

Bill Teehan made several comments/ announcements before adjourning the meeting:

- Time line: we need to get management recommendations done in the next several months.
- We will draft your changes into rule and take it to the Commission, then it goes to the public
- We would prefer to go to Commission in February;
- Data requests:
  - Slot size changes
  - Close season scenarios
  - Bag limit
  - Assessment update
- We will try to get this to you for next meeting; this would be the deliverable for next meeting
- You can look at short and long term solutions; recommendations
- Think about what you want done and when you want it done

## **ADJOURN**

The meeting was then adjourned.

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