

Considering the Near-Term Fisheries Implications of Large Scale River Diversions: An Interactive Panel Discussion

March 6, 2017 Pontchartrain Center, Kenner, LA
Theme of summit: Adapting to Change

Overview

Major river sediment diversions proposed in the Louisiana Coastal Master Plan were the subject of an interactive session held at the Louisiana Fisheries Forward Summit on March 6, 2018 at the Pontchartrain Center in Kenner, LA. “Considering the Near-Term Fisheries Implications of Large Scale River Diversions” was a moderated panel discussion in which two resource and restoration managers (LDWF, CPRA) heard from five representatives of four state-sanctioned fishery advisory councils: the Louisiana Oyster Task Force (LOTF), the Louisiana Shrimp Task Force (LSTF), the Louisiana Crab Task Force (LCTF), and the Louisiana Finfish Task Force (LFTF). The session focused primarily on socioeconomic considerations of large scale diversions, with the target audience being summit attendees working in fisheries-dependent businesses, including: commercial fishers, charter operations, seafood docks and dealers, processors, and retailers. Private sector input to the panel was collected in real-time during the session with active respondents (n=88) providing input to 10 questions via electronic polling devices. This brief report summarizes the background, rationale, format and results of that session.

Background

The Louisiana Coastal Master Plans for 2012 and 2017 called for a new generation of large-scale sediment diversions to be implemented on the Mississippi River below New Orleans. The primary objective of these projects is to offset coastal land loss by harnessing the alluvial processes of the river for the purpose of coastal land-building. The largest of these proposed structures, the Mid-Barataria Diversion, would have a maximum flow capacity of 75,000 cubic feet per second. The second largest, the Mid-Breton Diversion, would have a maximum flow capacity of 35,000 cubic feet per second. The Mid-Barataria Diversion is currently undergoing permit review by the US Army Corps of Engineers. The Mid-Breton permit review is expected to begin in late 2018.

As part of these reviews, each project will be subjected to an environmental impact statement (EIS) assessment based largely on preliminary strategies for operation. Some of these assessments have already been initiated through modelling commissioned by the Louisiana Coastal Protection and Restoration Authority (CPRA). Those assessments; however, have focused primarily on large-scale, programmatic impacts (i.e. coast-wide changes in landscape, productivity, and economic activity over a 50 year scale).

Rationale

Through a combination of physical and biological modelling projections, CPRA has preliminarily concluded that the master plan (as a whole) will be net-positive in terms of state-wide fisheries impacts over 50 years. The EIS process; however, is deigned to examine impacts at the project-level. Biophysical modelling can help characterize changes in the long-term distribution and productivity of specific fish species, but more targeted assessments are required to examine socioeconomic effects. A number of

external assessments have reiterated this point and made specific recommendations for project-level impact assessments of sediment diversions at smaller spatial and temporal scales. Some related excerpts are provided below:

- *“In terms of fisheries impacts...the effect of those changes on fishing costs and fishing community impacts could be described. Does a particular diversion lead to significant losses to a fishery? If so, what is the economic cost of those losses (e.g., in terms of landing revenues)?”*

Diversion Expert Panel Report #4, Water Institute of the Gulf (2015)

https://thewaterinstitute.org/assets/docs/reports/03_24_2015_Diversion-Expert-Panel-Report-4.pdf

- *“Express socio-economic outcomesfor all available time steps, as opposed to outcomes in year 50 only.”*

Diversion Expert Panel Report #6, Water Institute of the Gulf (2016)

https://thewaterinstitute.org/assets/docs/reports/1_12_2016_Diversion-Expert-Panel-Report-6.pdf

- *“Having analyses at these different scales (1-5y and 50 y) could help diminish the “tyranny of the horizon” - in which feasibility and impact results are unintentionally biased by commissioning analyses at temporal and spatial scales that are either too large or too small.”*

NOAA/CPRA Working Meeting on Proposed River Diversion Project Socioeconomic Analysis and Adaptive Management Plan Development (2015)

<http://www.cnrep.lsu.edu/pdfs/Workshop-Summary-NOAA-CPRA-Oct-2015.pdf>

- *“Clearly defin(e) the spatial and temporal scale, including both short-term and long-term effects, that is appropriate to inform the decisions and provide consistency of analysis”*

Building Land in Coastal Louisiana: Expert Recommendations for Operating a Successful Sediment Diversion that Balances Ecosystem and Community Needs, Peyronnin, N., R. Caffey, J.H. Cowan Jr., J. Dubravko, A. Kolker, S. Laska, A. McCorquodale, E. Melancon Jr., J.A. Nyman, R. Twilley, J. Visser, J. White and J. Wilkins. 2016. Building Land in Coastal Louisiana: Expert Recommendations for Operating a Successful Sediment Diversion that Balances Ecosystem and Community Needs.

www.MississippiRiverDelta.org/DiversionOpsReport

- *“A thorough socioeconomic evaluation should be undertaken, based on fishery model outputs and established socioeconomic valuation methodologies. This information should be based on both short-term and long-term fishery model outputs both with and without project implementation.”*

Mid-Barataria Sediment Diversion Project Scoping Report (2018)

www.mvn.usace.army.mil/Portals/56/docs/regulatory/permits/EIS/2018_MBSD_Scoping%20Report.pdf

Format

The 2018 Louisiana Fisheries Forward Summit was held on March 6 at the Pontchartrain Convention Center in Kenner, LA. The event attracted more than 500 attendees and featured more than 50 vendors and displays covering a wide range of topics related to the technology, regulation, marketing of commercial fisheries. As part of the Summit, a moderated discussion panel was scheduled to allow commercial fishermen to weigh-in on pending sediment diversion projects in the Southeastern region. The panel was structured around interactive polling in which audience members responded to a series of questions regarding the scale and extent of near-term impacts expected from the proposed sediment diversions. Polling was conducted using Turning-Point software (clickers) with results shown on screen in real time followed by a series of facilitated panel discussions. More than 150 people attended the session and 88 individuals participated in the audience polling. Polling devices were distributed only to attendees involved in Louisiana fisheries or seafood related businesses (e.g. harvesters, docks/dealers, processors, retailers, charters). The moderators and discussion panelist were as follows:

Moderators:

Dominique Seibert	Assistant Marine Extension Agent, Plaquemines and St. Bernard, LSU AgCenter and Louisiana Sea Grant
Earl Melancon	Fisheries Professor Emeritus, Nicholls State University and Louisiana Sea Grant Fellow

Panelists:

Acy Cooper, Jr.	Louisiana Shrimper's Association
Dan Coulon	Louisiana Oyster Task Force
Brittney Breaux	Louisiana Crab Task Force
Trey Cooper	Louisiana Finfish Task Force (Commercial)
George Huye	Louisiana Finfish Task Force (Recreational)
Patrick Banks	Louisiana Department of Wildlife and Fisheries
Brian Lezina	Louisiana Coastal Protection and Restoration Authority

Polling Results

The session lasted approximately two hours during which nine key polling questions were administered during a moderated panel discussion. These questions assessed general aspects of demographics (profession, commodity, and region), preferences for scale of impact analysis (time and area), general levels of concern, concerns about specific operational factors, preferences for accommodation, and strategies for adaptation. The following section details the audience responses by polling question.

1. Profession

What business category best describes your commercial operations?

(Choose one only)

<u>Category</u>	<u>% of responses</u>
Comm. Fishermen	78
Dock/Buyer	4
Seafood Processor	4
Seafood Retailer	6
Charter Captain	4
Other	4

2. Commodity

What fishery category accounts for most of your commercial operations?
(Choose one only)

<u>Category</u>	<u>% of responses</u>
Shrimp	58
Oysters	19
Crabs	13
Finfish	9
Not applicable	3

3. Region

In what coastal area (basin) does most of your business activity occur?
(Choose one only)

<u>Category</u>	<u>% of responses</u>
Pontchartrain	15
Breton	10
Barataria	38
Lower Mississippi	3
Terrebonne	22
Southcentral/SW LA	13

4. Time Scale

What's the best time frame for understanding the near-term impacts of a diversion project on your businesses?
(Choose one only)

<u>Category</u>	<u>% of responses</u>
First 5 years	81
10 year mark	14
20 year mark	1
50 year mark	4

5. Concern

How important is it to address the near-term ecological and economic impacts of large diversions on fisheries in your area?
(Choose one only)

<u>Category</u>	<u>% of responses</u>
Very important	98
Important	2
Somewhat Important	0
Unimportant	0
No opinion	0

6. Area Scale

What's the best geographic scale for understanding the near-term ecological and economic impacts of a diversion project on your businesses?

(Choose one only)

<u>Category</u>	<u>% of responses</u>
Across the coast	23
Region	35
My Local Basin	42

7. Impact Factors

What factors are most important for understanding the near-term ecological and economic impacts of a large diversion project on your business?

(Select all that apply)

<u>Category</u>	<u>% of responses</u>	<u>% of respondents</u>
Flow rate	18	67
Time of year	15	56
Salinity	20	75
Water temp	11	41
Water depth	9	32
Sediment load	14	50
Nutrient load	13	49

8. Accommodation

What are the valid ways to address any negative near-term impacts from a large project that might occur to your business?

(Select all that apply)

<u>Category</u>	<u>% of responses</u>	<u>% of respondents</u>
Flow restrictions	27	53
Relocation programs	16	32
Re-training	8	16
Compensation	34	66
Other methods	24	12
None required	3	6

9. Adaptation

"If a large diversion is built close to my area, I plan to..."

(Choose one only)

<u>Category</u>	<u>% of responses</u>
Continue what I'm doing	35
Travel farther to fish	24
Relocate my business	4
Pursue new species	4
Find a new line of work	6
Other	28

Polling Summary

- Results of the polling indicate that respondents came from a range of professional vocations, although a large majority (78%) were commercial fishery harvesters. Primary species targeted reflected the economic contribution of the state's major coastal fisheries, with shrimp accounting for most respondents (58%), followed by oysters (19%) and crabs (13%).
- Two thirds of respondents indicated their businesses were primarily located in the southeastern region, with the Barataria Basin accounting for the largest number of respondents (38%). Regardless of location, nearly all respondents (98%) indicated that it was "very important" to conduct scale-specific impact assessments of the ecological and economic impacts of large sediment diversions on fisheries.
- When asked about the time and spatial scale that would be most appropriate for analyzing ecological and economic impacts of a sediment diversion on their businesses, respondents strongly favored that analyses be conducted within the first five years (81%) at either the local basin scale (42%) or regional scale (35%).
- Specific concerns regarding operational strategies were greatest for salinity (75%), flow rate (67%) and timing of diversion operations (56%).
- Monetary compensation was the most frequently selected accommodation option (66%), followed by flow restrictions (53%) and relocation programs (32%). Adaptation strategies for diversions seem to reflect the historic preferences to maintain business as usual (35%) or to adapt to operations via other means (28%).
- While nearly a quarter (24%) of respondents acknowledged that they may be forced to travel further to fish, very few expressed a willingness to relocate (4%), pursue new species (4%), or find a new line of work (6%).

Panel Discussion

The following section contains selected comments from five representatives of the fisheries task forces and two representatives of states agencies. For a complete record of comments, a video of the discussion panel has archived at: <https://www.youtube.com/watch?v=p67eYe-A84c>

Task Force Representative Comments

Time Scale and Concerns

- “For the oyster farmer 3-5 years is a good gauge for business planning”
Dan Coulon, LOTF
- “It’s a year-to year thing when it comes to finfish (recruitment)”
Trey Cooper, LFTF
- “1-5 years? ..the first year is the one that is really gonna kill us” ...I’ve yet to see how they are going to (address) the fishermen that will be affected...They need to take a good hard look at what they are about to do to us”
Acy Cooper, LSTF

Area Scale

- “Fishermen are very territorial...when it comes to crab (impacts)...you’re gonna push guys out the basin into to new areas, they are going to be on top of each other...”
Britney Breaux, LCTF
- “We (recreational fishing) have the same issues and concerns....we are commercials in the sense that we create commerce... I see fisheries management moving towards smaller scalesI think that direction is better because each basin is unique.”
George Huye, LFTF
- “Region is better than local basin for (oyster) economic impact assessment”
Dan Coulon, LOTF

Impact Factors

- *Salinity* - “We need a fluctuation, we can go from 5-20, but we hope it stays somewhere around 10-15...You can’t raise seafood in river water”
Dan Coulon, LOTF
- *Timing* - “Right now, spring of the year, we’re getting the (river) rise...you open up now...when the shrimp are coming...and they’re not going to come in”
Acy Cooper, LSTF

- *Flow rate* - “The amount of freshwater they are going to pump at one time makes a big difference as well as the time of the year - baby crabs need salinity, but all of these factors affect them”
Britney Breaux, LCTF

Accommodation

- *Relocation* - “Younger ones like myself might relocate or travel further – but a lot of older fishermen can’t do that. Trey Cooper, LFTF
- *Retraining* - “I’m 60 years old...where do I find another job?” Acy Cooper, LSTF
- *Flow Restrictions* - “Who is going to determine when to open it and when to close it?”
Acy Cooper, LSTF
- *Compensation* - “If we’re young enough we can use that money to go on to another industry, if we’re older we can retire.” Dan Coulon, LOTF
- *Compensation* - “Our state is broke...if ya’ll think you’re gonna get money, it’s not gonna happen” Britney Breaux, LCTF

Adaptation

- *Continuing on* - “We gonna keep doing what we have been doing I hope that it just changes the fisheries and doesn’t kill us”
Acy Cooper, LSTF
- *Travel* - “The average non-commercial rec fishermen can trailer a boat and move between basins ...but the guides and the marinas have much of the same fixed investments of the commercial sector”
George Huye, LFTF
- *Other* - “It’s well known that the state has not done its job, they have done the first step of three...(design), but have not identified the problems that these diversions are going to cause and have not identified any practical solutions”
Dan Coulon, LOTF

Agency Comments

- Estuarine fisheries need habitat. We have to work towards restoring that habitat. Large diversions that have been on the books for decades are now becoming a reality.
- But...participation in this session has been “humbling”, an experience will “make us better managers”, we recognize this is a “very serious topic”.
- We can look how much land we can build in 50 years, but it’s also important to know what we may do to fisheries and fishers in year 1, 2, or 3.

- We recognize that large scale management will change things, we've begun putting things in place to understand project effects on a much smaller spatial scale.
- State has applied for a permit for Mid-Barataria. We're in the early stages of that - and this is where all the things we discussed today come together.
- Operation plans are critical and will drive both ecological and economic impacts (positive and negative).
- We recognize the available options are not great... options like relocation may work for some, but not for everyone. We need to explore other options.
- Communication between LDWF and CPRA has improved dramatically on this subject.
- We're committed to doing a better job with understanding impacts and standing with industry in this new paradigm.

Next Steps

This report and a presentation on these findings will be delivered at fishery task force meetings in late spring and early summer of 2018. A video of the panel is archived at:

www.youtube.com/user/LouisianaSeaGrant