

2012
New England
Derelict Fishing Gear Workshop

Conversations Leading to Collaboration



8:00-9:00 Registration and Coffee

9:00-9:15 Welcome and Introductions

9:15-9:50 How and Why

- **Different points of view on common interest**

Where are we now – scope, scale & impacts of effects

Where would we like to be – working waterfront, resource managers, etc.

How do we get there?

- **How we got here**

5IMDC last year – issues in our backyard, opportunity to bring together the states

- **Run through Agenda**

First, hear from sectors as sectors.

After all small groups – report outs.

Getting in to what is derelict fishing gear: Definitions for this meeting

- By-products of fishing industry activity that persists in the marine ecosystem of NE – being lost, neglected or dumped (Source: Laura Ludwig)
- Abandoned, lost or otherwise discarded fishing gear (Source: 5IMDC)

Another point – there is more debris in the ocean, but at this meeting we're focusing on DFG because that is what is of interest

We are not only talking about lobster gear

Question: Is there as much effort placed at the federal level on other types of marine debris that doesn't put fishing in the cross hairs?

Answer: NOAA uses proposals from grant opportunities to determine what people care about across the country. What people care about depends on the region. We're focusing on what the region cares about – based on information that makes it to NOAA.

Question: Do you have environmentalists pushing you on this?

Answer: It is a wide variety of interested parties. Some trying to get researchers interested. Some NGOs are interested.

9:50-11:30 (with break) Jumping In!

We need to know where everyone is starting from, so working with your colleagues in small groups you'll be identifying specifics about derelict fishing gear. (*Working within sectors [NGO Employees, State Employees, Federal Employees, Fishermen, and Cooperative extension/media], each group addressed the following topics based on their knowledge: magnitude of DFG, composition, impacts, legal issues, how created, existing actions, and any other thoughts.*)

NGO Employees

Magnitude:

- DFG 2/3 of debris collected
- #3 shoreline
- #1 by weight – shoreline
- Underwater: ? need more information; a lot and it moves
- 40 – 50k lost traps / year (reported) in Maine → # of replacement tags requested per year; no longer can be taken out pre-season; prior to 2009, given 80 up front, made the trap limit 880. So now you can get up to 20. It made it so there were only 1/3 of replacement tags issued
- 10 – 20% in Chesapeake
- Floating: need information, net scraps
- Don't have any way to quantify on how many traps lost by recreational fishers in Maine or Massachusetts

Composition:

- Traps (#1), Rope (#2), Buoys (big), trap pieces – including doors (big), crushed traps (big) net, net scraps, gloves, bait bags, bait boxes

Impacts:

- POPs from plastic coasting & potential transfer into fish and food chain and associated perception:
Agreed that the impact is probably minimal but the perception could be magnified
- Ghost fishing/bycatch
- Entanglement (unknown if from DFG or set gear)
- Safety
- Shoreline structure & erosion
- Aesthetic

Legal Issues:

- Not allowed to remove
- Good experience with DMR, concern with taking this to scale – if everyone was looking for permits for removal, this would become an issue; rights of landowner vs. rights of fishermen

How Created: (Top six listed from Maine)

1. Boat traffic
2. Sinking ground line (change)
3. Storm action
4. Molestation
5. Mobile vs. fixed
6. Marine mammals

Existing Actions:

- Shoreline cleanups
- At-sea recovery
- Disposal programs (inc. Fishing for Energy)
- Education/prevention

Future Actions:

- Standardized database – to ID where gear predictably accumulates
- Standardized data cards – so people contributing to beach cleanups, can contribute consistent beach cleanup
 - i.e. what is already out there is not specific enough
- Definition of DFG that facilitates removal that is consistent so that people know what they're allowed to take; and hand in hand, development of regulations that facilitate
- Reporting system

Fishermen

Magnitude of Problem

- Not an intentional problem
- Losing gear to shipping – tank, cruise
- What is the real % of lost gear
- Concern for lost profits
- Concern for safety issues; gear conflicts, like bringing up net gear and the safety of fishermen when they're trying to haul it back up
- Bringing the gear up – when tangled
- Public perception that fishermen don't care about the ocean – fishermen not the cause of problem and want to change this perception
- Fishermen do care about the issue
- Non commercial gear (recreational industry also causes problem, especially end of season b/c don't know how to tend traps as well.
 - Abandoned gear at end of season

Reasons

- Whale rules
- Shipping lanes
 - Tankers, cruise, recreational boats: breaking lines for traps
- Non- Owner operated;
 - If you have someone that's not as invested in the boat, not as aware or care of prevention
- Cost of business
 - Making vs. buying gear; more vested if you make your own gear
 - Abandon gear intentionally (changing rules)

Legal Issues

- Can't have anyone's gear but your own
- Federal vs. state laws – fishermen in federal waters may have legal issues in state waters
- Law enforcement understanding of rules → EPAs; consistent enforcement amongst all fishermen

Measures to address

- Consistency b/n state and federal regulations – with rule making bodies
- Identification of special permits for gear collection
- Anchorage by shipping – need to enforce laws.
 - Anchorage spots not being used, dropping on gear and causing a lot of lost gear.
- Need to address why gear is lost

Shipping

Whale rules – vertical lines; ground lines

Biggest reasons we're losing is new whale rules and different types of shipping and breaking gear

What are we doing?

- MA – coastal program
 - Limited scope R.M.D. Remove backyard MD by providing disposal sites; focused in Stellwagen
 - Bank – joint project between DMF, Law Enforcement and fishermen
 - DMF, law enforcement Fishermen
 - Current/potential MD
 - Need cooperation b/n industry, government and enforcement
 - CAN - grappling (St. John)
 - ME 0 gear retrieval
- Consistency issues with state/federal regulations - want to maintain that consistency b/n state and fed.

Federal Employees

Magnitude of Problem

- Loss of opportunities to catch fish
- Huge problem Gulf of Maine – impacts of gear
- #1 debris issues in sanctuary

Composition

- Rope and lobster pots
- Nets (gill)
- Monofilament

Impacts

- Fishery sources (lobster, shellfish/fin fish, groundfish)
- Sea birds
- Turtles
- Marine mammals
- Economic impacts (fishermen)
 - Ghost
 - Replace gear/repair
 - Lost fishing time
 - Hazard navigation
- Human health & safety – recreational divers
- Habitat
- Historic shipwrecks
- Aesthetic Impacts – offshore & onshore

Legal Issues

- Out of date laws that prevent clean-up
- Hard to identify guilty parties
- Gear conflicts that result in lost gear

- USCG using dedicated resources investigating gear conflicts
- Lobster wars
- Confusion over state & federal laws. Greater awareness of laws

How created/reasons

- Economics – increase fuel – decrease cost of lobster, have to pay to dispose of gear
- Lack of shoreside disposal systems
- Storms
- Neglect
- Gear conflict
- Accidents
- Space management – navigating waterways
- Marine mammal entanglement

Existing measures/actions to address

- Fishing for Energy
- Fishing line recycling (other gear also)
- Cooperation with fisherman – funding for cooperation efforts
- Education of issues/laws impacts

State Employees

Magnitude of Problem

- We don't know...
- Can we use the data from shoreline cleanups?

Composition

- Traps/pots (Cape Cod Bay north to ME)
- Gillnets (RI)
- Monofilament
- Bait packaging

Impacts

- One the natural resources
 - Habitat impact = damage and enhancements
- Financial Economic
 - Studies needed
- Safety at sea
 - Entanglement
- Seabird nesting habitat
- Esthetics – socioeconomic
- Loss of gear

Legal Issues

- Separating debris management from law enforcement
- Addressed as a safety concern

Hazard to navigation

- Maintaining protection for fishable gear vs. the need to remove unusable gear
- Identify abandoned / lost of useable gear

How created/reasons

- Sink lines – new rules
- Do the laws and regulations actually work on the water
- How does the law impede effect disposal/possession
 - Clean-ups – can we make this easier with industry buy-in
- Storms
- Gear conflicts
- Vessel traffic – cruise ships
- Gear failure lines

Existing measures/actions to address of gear

- 2 year effort in ME – off-shore
- Ongoing clean-up – shoreline on special days in NH
- Special permits to allow molestation
- Covanta program RI - ME

Cooperative Extension and Media Employees

Magnitude of Problem

- Out of site out of mind
 - If this was on land
- Increasing...
- Anecdotal
- Seeing more on uninhabited islands
- Major issue 5-10% loss
- 40-80 traps per fisherman?

Composition

- Wire/wood traps
- Technologies helped some issues and created others

Impacts

- Clumps
- Tug and barge
- Impacts/safety issues
- Property fouling – snagged and basically healed
- Financial – we are losing money

Legal Issues

- Transparency
- Common sense vs. technical

How created/reasons

Existing measures/actions to address

- Incentives?
- Difficult to handle
- Rope is fouled to the extreme
- Can you take them to YOUR dump
- Recyclability Issues
- Are there dumping grounds
- Research issues

Action to address

- Could a financial incentive work
- Pay to pick
- How?
- New floating/neutral buoy line

Anything

- How do you deal with the issues you cannot deal with?
 - Storms
 - Yahoos
 - Defending territories
 - What about recreational?
 - Inexperience
 - Give up and abandon after loss
 - Poor placement

• Wrap Up:

- Commercial shipping repeatedly mentioned as an accessory to the problem
- Needs more open communication among the various marine/boating interests
 - Outreach to rec boaters on avoidance and reporting incidents of entanglement
- Requests for funds to assist in retrievals
- Regulations limit retrievals
- Short vs long term strategies for dealing with regulations/policy
- No cost strategies for reducing impact of lost gear (if gear modifications necessary)
 - Although impact seems minimal on resource
- Tenuous balance between fishermen keeping things on the downlow and funding agencies needing to promote and highlight project progress and success

11:30-12:45 Presentations on the state of knowledge

- Bob Glenn, MA DMF, on the results of a two-year study on derelict lobster pots in MA
- Laura Ludwig on what's been learned during removal activities through the Gulf of Maine Lobster Foundation in ME
- A review of the legal situation by Major Al Talbot (ME) and Dan McKiernan (MA)

12:45-1:45 LUNCH (provided)

1:45-3:00 What's being done elsewhere

- Tom Mathews, Florida Fish and Wildlife Conservation Commission: Derelict trap retrieval rules and fees in Florida's lobster, stone crab, and blue crab fisheries
- Kirk Havens, Virginia Institute of Marine Science: Engaging commercial fishers to retrieve lost blue crab pots in the Chesapeake Bay, USA
- Nick Furman, Oregon Dungeness Crab Commission: Operation CRABPOT: Industry-funded gear retrieval on the Oregon Coast

3:00-3:15 BREAK

3:15-4:15 Strategy Prioritization

Based on what you know and what you've heard, we're going to prioritize strategies (which will be provided, see Appendix 1, Plan Outline 1) on how derelict fishing gear could be addressed. *(Each participant received three stickers to allocate among the 12 strategies. Each participant could also suggest edits or comments on the goals and strategies using sticky notes.)*

Goal 1:

Reduced amount of derelict fishing gear introduced into the marine environment

To solve the derelict gear problem we need to address the causes – shipping, whale laws

Strategy A

Conduct ocean-user education and outreach on derelict fishing gear impacts, prevention, removal, and management. (Votes received – 10)

- ▶ Conduct on DFG to ensure industry is aware of impacts, weighs to avoid loss/proper disposal practices/laws/available equipment.
- ▶ I don't think we need to spend much time discussing this but is a top need.
- ▶ Who is the audience and what are you trying to accomplish.
- ▶ "Consumer" education and outreach
- ▶ Implement policies and incentives to prevent DFG
- ▶ If this goal is about prevention then removal and management is extra.

Strategy B

Develop and strengthen implementation of waste minimization and proper waste storage at sea, and of disposal at port reception facilities, in order to minimize incidents of ocean dumping. (Votes received – 10)

- ▶ Proper storage space for gear in close seasons
- ▶ Develop and strengthen (delete waste minimization, not relevant to DFG) proper waste storage and sea and port reception facilities to minimize ocean disposal
- ▶ Develop and strengthen implementation of waste minimization and disposal at port facilities in order to minimize improper ocean disposal
- ▶ Facilitate fishing gear debris disposal process
- ▶ Change end phrase ". . . in order to ENCOURAGE SHORESIDE disposal" (less fault-based)
- ▶ Makes no sense in this area
- ▶ Change waste minimization and waste management to DFG minimization and DFG storage

Strategy C

Develop and strengthen implementation of industry best management practices (BMP) designed to minimize the creation of derelict fishing gear. (Votes received – 8)

- ▶ ". . . implementation of boating, shipping and fishing industry . . ."

- ▶ This is key!
- ▶ Combine C and D “Develop/promote use of FG mods or alternative tech or practices to reduce the creation
- ▶ Strategy C, D and E could be combined
- ▶ Best management practices through fish gear mods and legislative policies
- ▶ Combine with D: Develop and strengthen impl. of industry BMPs, fishing gear modification and alternative technologies . . .
- ▶ Has to be wider than just industry, if other ocean users are enablers/contributing to continuation of the problem.

Strategy D

Develop and promote use of fishing gear modifications or alternative technologies to reduce the loss of fishing gear and/or its impacts as derelict fishing gear. (Votes received – 20)

- ▶ Develop, promote, and evaluate effectiveness of DFG mods . . .
- ▶ This belongs in Goal 2 (half of it probably does)
- ▶ Belong under Goal 2
- ▶ No!

Strategy E

Develop and strengthen implementation of legislation and policies to prevent and manage derelict fishing gear. (Votes received – 12)

- ▶ We are not going to stop commercial shipping. Implement policies whereby commercial shipping and commercial fishermen are at the same table discussing solutions.
- ▶ Make oil tankers stick to a set route
- ▶ Give us back floating groundline
- ▶ No
- ▶ At end add: consistent between states and federal agencies.
- ▶ Implement policies and incentives to prevent DFG
- ▶ That reflect current status of the industry and utilizes research and ocean observation.

Strategy F

Build capacity to monitor and enforce national and local legislation. (Votes received – 1)

- ▶ Strategy E and F are really the same one is just a local level and the other is national, but implementation. Is useless without proper monitoring and enforcement.
- ▶ Enforce lanes used by large ships, cruise ships, tankers and others. Fishermen will be in their lane and larger ships in theirs away from fishing gear.
- ▶ Waste of time
- ▶ Larger ships or vessel operators or companies donate a designated fund of money to help remove gear. They are big part of problem they should be also part of solution.
- ▶ Make more specific: legislation to . . . reduce DFG introduced into environment?
- ▶ Add to monitor and enforce-adapt and include legislation AND regulation
- ▶ Belongs under goal 1
- ▶ Repetitive

Goal 2:

Reduced impact of derelict fishing gear in the marine environment

- ▶ Reduce negative impacts of derelict fishing gear in the marine environment
- ▶ Should include Goal 1 Strategy C into Goal 2

Strategy A

Conduct education and outreach on derelict fishing gear impacts and removal. (Votes received – 3)

Strategy B

Develop and promote use of technologies and methods to effectively locate and remove derelict fishing gear accumulations. (Votes received – 20)

- ▶ Combine strategies B and C, develop and implement technologies to effectively remove DFG through joint industry/government/NGO/public (volunteer) initiatives.
- ▶ That is affordable to a variety of users and implementable at community, state, and regional levels.
- ▶ Add “efficiently locate and remove derelict fishing gear accumulations.”
- ▶ Regulate amount of fishing gear to maximize catch-per-effort to maintain sustainable landings. Prevention by reduction.

Strategy C

Build capacity to co-manage derelict fishing gear removal response. (Votes received – 4)

- ▶ Co-manage – who? What? Needs clarification. Too vague

Strategy D

Develop or strengthen implementation of motives for removal of DFG encountered at sea. (Votes received – 13)

- ▶ Incentives within legal limits.
- ▶ Don't use “incentive” try motive or rephrase: “Develop or strengthen sense of responsibility for removal . . .”

Strategy E

Establish appropriate regional, national, and local mechanisms to facilitate removal of DFG. (Votes received – 8)

- ▶ Belongs under goal 1
- ▶ No!

Strategy F

Remove DFG from shorelines, benthic habitats, and pelagic water. (Votes received – 6)

- ▶ The shoreline would be less costly to clean or at least more visible and keeps the trash out of public view.

4:15-4:45 Day 1 Wrap-Up

Where we are now and what we're going to do tomorrow.

5:00-6:45 Informal Gathering

Come back for some less formal discussion with your workshop colleagues and a cash bar.

Please note we're starting an hour earlier tomorrow!

7:30-8:00 Coffee

Please note we're starting an hour earlier today!

8:00-8:30 Why are you here?

A phrase, a sentence – why did you take time away from your desk or boat to come to this workshop?

To learn how the industry can diminish the amount of derelict gear washing ashore.

I'm here to begin a dialogue about removing derelict fishing gear from the marine environment – particularly “trash” gear from the shoreline.

I am here to see how I can help with DFG solutions on a regional level – take the outcomes of the workshop and bring them to the states in the region.

Learn more about derelict gear and associated issues and lay a path for working across sectors to reduce derelict gear in the marine environment.

I came to share results of recent research on the impacts of ghost fishing. My primary interest is in population level effects on marine animals from derelict gear.

To ensure that whatever ideas and solutions to the problem of DFG will meet legal requirements.

Derelict fishing gear poses a risk to the environment and harms sustainable fishing. Addressing the issue will improve both fishing and the environment.

Interested in comparing D/G concerns, issues and solution from a northeast vs west coast perspective. Looking for ideas – what works, what doesn't.

If I didn't come here there would be more bureaucrats making decisions about my industry. I want to stop gear loss before it occurs.

To become more actively involved in actual DFGS retrieval projects with partners from across all aspects of the industry.

To explore possible future work with industry and concerned parties.

All stakeholders to be around the table to both solve and have input in the cleanup and restoration over our marine environment both shoreside and bottom.

To determine how to get funding for research before we develop a management plan or change regulations.

There may not be a “problem.”

Encourage a study to test the feasibility of using grappling bars to retrieve lost gill nets in high use fishing gear.

Design study to include cameras on grapple system to photograph nets to determine what bycatch they hold before being dragged up to provide a basis for determining amount of fishg/shellfish they had killed.

As a manager of a national marine sanctuary, it's incumbent on me to minimize adverse effects of fishing gear on sanctuary resources.

1. To learn solutions on how other states and areas plan to organize resolving ghost gear. 2. To hear fishermen's voice on how to make retrieving ghost gear successful.

From the commercial fishing perspective. I am not without name Dave Casoni. “If we are not at the table we are on the menu” – regardless of intentions something will result from this activity – let's make sure it is co-operative not one sided.

In hopes of securing funding to clean up D.G., it would be good PR spot. Also to try and figure out ways to stop the causes of D.G.

I am pleased and excited to participate (I was invited) in this forum mostly to meet my counterparts on the N.E. coast. I am curious to compare our relatively small boat fishery on the west coast with the fisheries in N.E. I hear some of the same problems that we have (or have had) and find solutions and the public process that solves problems to be similar, however painful for some to embrace.

Learn through discussion what the problem with DFG is – according to all the different groups here. What made everyone decide to come to discuss this topic?

I need to learn priorities around DFG so I know how best to invest in this region on this topic.

I came to this meeting to have a great understanding of all views behind DFG issues and the process behind solving marine debris issues.

To share and receive information from other states/jurisdictions and stakeholders about the means of reducing the impact of DFG on the marine environment given its persistent nature and growing public perception that it is a problem.

I am here to meet and talk to people from a variety of organizations and agencies; to make connections; to learn more about DFG issues in New England

Water contamination: plastics, chemicals (runoff, atmospheric, sewage). We are contaminating our waters

DFG is a problem in our area that has not been adequately addressed. This workshop is a step in the right direction by bringing examples of DFG recovery programs from other parts of the country.

I came today as a neutral party to hear about the effects of derelict fishing gear on the environment and to see the program side of marine debris.

Perceived problem, want to help start the discussion to figure out solutions.

To understand and learn about opportunities that would assist state partners in shoreside disposal of fishing gear before it becomes an environmental issue or DFG. Proper disposal options should be the front line or first step in taking care of this problem.

Came to learn facts, issues and possible solutions to derelict gear and marine life. Also environmental damage, lots of resources.

I came here to get a better understanding of what derelict fishing gear and what it does to the environment and the fishing industry. What are the economic and environmental costs/consequences and what we propose to do about it.

To learn more about this issue, determine if it is a problem and if so how can we move forward to address the issue.

I don't know why I'm here. Came to be educated if there is a problem or solution.

To gain insight on the DFG issue. We know that the problem existed but didn't know the magnitude of the problem.

I lead volunteers to perform monthly beach cleanups. While we find many types of trash from many sources, by weight, most comes from fishing related activities. I would like to work to see how we could reduce this. That is why I am here.

To listen to the impacts and the reasons for DFG. Also the cost of lost economic to industry and the effectiveness of DFG retrieval programs.

I was asked to share experiences from the Chesapeake Bay and hope the examples from that effort will be useful for NE to avoid "reinventing the wheel."

8:30-10:30 (with break) Populating the Strategies!

We're going to go a bit off the rails here to find new ideas (though not forgetting the old standards) for how to address derelict fishing gear. *(Working in mixed-sector groups, each group listed potential actions to address the top 4 [by voting] strategies [with suggested edits in brackets and strikeouts].)*

Goal 1:

Reduced amount of derelict fishing gear introduced into the marine environment.

Strategy D

Develop, and promote, [and evaluate the effectiveness] use of fishing gear modifications or alternative technologies to reduce the loss of fishing gear and/or its impacts as derelict fishing gear.

- ▶ Lessen the impact of a trap after it becomes lost
- ▶ Fishing with float line
- ▶ Study hog rings to see how long they really last
- ▶ Use steady clips to prevent end line chafing
- ▶ Put at a catenary weight/anchor on the float line to prevent dragging
- ▶ Talk to fishermen to find out other modifications they are making that are helpful
- ▶ Have a dumpster available to dispose of gear that is well managed, consistent and widely available
- ▶ Get draggers out of work who are willing to partner with barges to recover gear balls and sell for scrap and salvage
- ▶ Make sure any modifications to gear are cheap and practical
- ▶ Do a study on variability of degradation of rings and panels with the rate of degradation and the reasons for it.
- ▶ Do a cooperative test with gear modifications with industry
- ▶ Hire a consultant to develop a strategy around
- ▶ Start with a pilot but do RFP for fishermen, scientists, other interested parties
- ▶ Ease restrictions for recovery on an individual level
- ▶ Sought funding for cooperative research to develop fishing strategies to minimize loss
- ▶ Developed a time release mechanism on floats on gillnets
- ▶ Educate non-commercial sector to minimize losses
- ▶ Approach industry to identify problem areas and propose solutions for retrieval
- ▶ Use a survey to concentrate on where losses are
- ▶ Conduct an on-the-water survey of DFG
- ▶ Promote through usability studies different technologies, starting with targeted user group and going from there
- ▶ Promote change through transition incentives
- ▶ Develop a radar reflector for underwater detection. Flat air-tube on top of traps that could be easily detected.

Strategy E

Develop and strengthen implementation of legislation and policies [and incentives] to prevent and manage derelict fishing gear [consistent between state and federal agencies].

- ▶ Identify all the people in the problem, including the shipping industry.
- ▶ Create a fund/fee for all causes of DFG
- ▶ Change the laws for an easier process to pull DFG
 - Allow individuals to get gear out of water
 - Change the law so that it reflects what is actually happening and working now
- ▶ Get the commerce shipping industry to stay in shipping lanes and hold them responsible when they don't
- ▶ Reexamine the whale rules for the sinking groundlines
- ▶ Define abandoned and derelict gear and once it meets that standard it should be able to be removed.

- ▶ Identify ways for people to deal with this issue now. (a lot of policies, regs, rules are long processes)
- ▶ Make it easier to remove the gear that is obviously junk, esp on shoreline
- ▶ Take steps to render pots disarmed
- ▶ Sea Grant should take the lead for an annual conference to discuss shipping lanes
- ▶ Relax rules for possession of pots to reflect the process that is already happening
- ▶ Bring commercial shipping to the table
- ▶ Evaluate the current legislation and determine what is working now and what isn't, and what can we tweak to make small changes
- ▶ Legislation should be the last resort
- ▶ Surcharge on boat licenses (all boat licenses)
- ▶ Ease restrictions on law enforcement (give more discretion especially at federal level)
- ▶ Redefined derelict fishing gear, make more common sense rule
- ▶ Introduce legislation to change fishing gear into biodegradable materials
- ▶ Require the use of proven technologies that reduce the likelihood of DFG loss and increase recovery
- ▶ Streamline awareness, get the word out to interested parties.
- ▶ Get all boating interest to the table – pilot association

Goal 2

Reduced impact of derelict fishing gear in the marine environment

Strategy B

Develop and promote use of technologies and methods to [efficiently]-effectively locate and remove derelict fishing gear accumulations [that is affordable to a variety of users and implementable at community, state, and regional levels.]

- ▶ Use sonar to confirm locations of DFG
- ▶ Take coordinates from fishermen and plot them on charts to visualize scope of problem
- ▶ Bounty on DFG for fishermen to remove
- ▶ Use technology to prioritize work areas for removal
- ▶ Establish reporting mechanisms for removal
- ▶ Use side scan sonar technology to aid in removal efforts
- ▶ Enhance communications and teambuilding with constituents to understand and develop technology
- ▶ Develop and promote programs for nets and grapples to drag specifically for DFG
- ▶ Talk to fishermen about areas where DFG occurs
- ▶ Use SSS for wide area searches , ROV and multi-beam for ground trothing to determine boulder piles from pots
- ▶ Research on grapples to find most effective design
- ▶ Technology to guide ships in designated lanes and away from pot concentrations
- ▶ Once ashore, technology to recycle and reunite pots with owners
- ▶ Need to have numbers, lots of pots, to make funding sources who are not stakeholders involved as a means to get funding
- ▶ Work on ways to become more efficient (Grapples, etc) to get most bang for the buck, which makes for easier funding
- ▶ Experiment with grapples to build prototypes for different bottom types
- ▶ More collaboration to coordinate DFG efforts, current and future programs to work together, not be redundant, for better coverage and is more efficient.
- ▶ Determine which technology works in different geographic areas (currents and hard/soft bottoms)
- ▶ Individual fishers can work to experiment with better escape mechanism (ie hog rings, rottin' cotton)
- ▶ Reporting system that harvesters call in when lost gear occurs (when and where) to plot on GIS to see where problem areas are in order to target these areas to get more bang for buck
- ▶ See what works in other fisheries; don't reinvent the wheel

Strategy D

Develop or strengthen implementation of incentives [motives] for removal of DFG encountered at sea
Establish registration fee on recreational boaters to use for debris removal (intentionally debris removal, not DFG)

- ▶ Determine reasonable bounty on DFG based on fishermen's input
- ▶ Place recycling dumpsters in strategic locations
- ▶ Enable handling of DFG in legal manner
- ▶ Establish regular sanctioned beach cleanup days
- ▶ Coordinate cleanup days with fishermen, maximizing use of DFG bounties
- ▶ Establish state endorsement/letter of authorization to allow handling of DFG (who qualifies for endorsement is open question)
- ▶ Discuss with USCG about using fines on shipping interests to be used for DFG mitigation
- ▶ Increase registration fee for recreational lobster licenses to go towards DFG mitigation
- ▶ Establish fees on shipping interests for using state waters/ports/anchorages that go into fund for DFG mitigation
- ▶ Use a portion of federal damage assessments funds for DFG mitigation
- ▶ Fairly compensate fishermen for efforts (day's pay for day's work)
- ▶ Take coordinates reported to marine patrol and await a barge
- ▶ Hold easy dock-side collections for incentive for collection
- ▶ Identify whose it is, make every effort to return to use, or if unusable every effort to bring it in
- ▶ Throw it back overboard
- ▶ Pay fishermen to return what they found to the co-op (central location for collection)
- ▶ Ensure co-op was certified to collect gear and certify it was DFG
- ▶ With no money, bring to a storage area, recycle for scrap, and hold annual pig roast

10:30-11:00 Next Steps

We're all excited, so what next?

Suggestions and Thoughts for Moving Forward

Lessons learned from previous work not captured

Suggestions:

- Informal, locally-based meetings for updates
- Face-to-face, yearly or in alternate years

Use technology for sharing info in between meetings

"Take the meeting to the meetings"

Regional website for DFG/marine debris

- Links
- Approach to issue (explanation page)

Twitter/Facebook

Start looking into taking steps now for immediate response following storms or disasters

Garner funding

Get other agencies, groups involved

NERACOOS

Shipping industry

Gillnetters/Ground/Recreational

Incorporate DFG/MD issues into ocean plans

NROC

Form a specific legislative working group across state boundaries for lobbying, awareness.

Recruit folks with special ability, talent, or position to make things happen at that level.

Field work

Actually start joining forces and working together on actual projects

Start with those already underway and move toward creating new joint opportunities

11:00-11:30 Anything else that needs to be said?

11:30 Workshop ends

Appendix 1

New England Derelict Fishing Gear Plan

Draft 1

February 28, 2011

Purpose of Plan: This plan is intended to facilitate cooperation and coordination by outlining the current state of knowledge about derelict fishing gear in New England waters and identifying those areas where future activities could concentrate to better understand and decrease the impacts of derelict fishing gear.

Introduction

DFG as an issue, explanation

Regional recognition of problem

Stakeholders

Method for developing plan

Section 1: Review of the State of Knowledge and Activities

Magnitude of problem

Composition

Impacts

Legal issues

How created/reasons

Existing measures/actions to address

Section 2: Goals, Strategies, Activities

Goal 1:

Reduced amount of derelict fishing gear introduced into the marine environment

Strategy A

Conduct ocean-user education and outreach on derelict fishing gear impacts, prevention, removal, and management.

Strategy B

Develop and strengthen implementation of waste minimization and proper waste storage at sea, and of disposal at port reception facilities, in order to minimize incidents of ocean dumping

Strategy C

Develop and strengthen implementation of industry best management practices (BMP) designed to minimize the creation of derelict fishing gear.

Strategy D

Develop and promote use of fishing gear modifications or alternative technologies to reduce the loss of fishing gear and/or its impacts as derelict fishing gear.

Strategy E

Develop and strengthen implementation of legislation and policies to prevent and manage derelict fishing gear

Strategy F

Build capacity to monitor and enforce national and local legislation
Techniques for accomplishing: research and collaboration

Goal 2:

Reduced impact of derelict fishing gear in the marine environment

Strategy A

Conduct education and outreach on derelict fishing gear impacts and removal

Strategy B

Develop and promote use of technologies and methods to effectively locate and remove derelict fishing gear accumulations

Strategy C

Build capacity to manage derelict fishing gear removal response

Strategy D

Develop or strengthen implementation of incentives for removal of DFG encountered at sea

Strategy E

Establish appropriate regional, national, and local mechanisms to facilitate removal of DFG

Strategy F

Remove DFG from shorelines, benthic habitats, and pelagic water
Techniques for accomplishing: research and collaboration

Clarification of terms

Research: Research is not an end in itself but the knowledge learned and applied allows better activities to be developed and pursued to achieve goals 1 and 2. People need data on their scale; what data exactly is needed.

Coordination and Collaboration: Coordination of efforts and collaboration across regions, organizations, or goals help goals to be reached more quickly and encourage the more efficient use of limited resources.

Appendix 2

Attendees

| Last Name | First Name | Organization | Email Address | City, State |
|---------------|------------|--|---------------------------------|--------------------------------------|
| Bradt | Gabriela | UNH Cooperative Extension | gabriela.bradt@unh.edu | Durham, NH |
| Brodeur | Jeff | Woods Hole Sea Grant | jbrodeur@whoi.edu | Woods Hole, MA |
| Burgess | LaTonya | NOAA Office of Response and Restoration | latonya.burgess@noaa.gov | Silver Spring, MD |
| Casoni | Dave | Fisherman, Plymouth, MA | lobsterteacher@hotmail.com | Plymouth, MA |
| Casoni | Beth | Massachusetts Lobstermen's Association | beth.casoni@lobstermen.com | Scituate, MA |
| Colvin | Andy | Congressman Pingree's office | kyle.molton@gmail.com | Maine (First Congressional District) |
| Cosby | Shelby | NOAA Office of Response and Restoration | shelby.cosby@noaa.gov | Silver Spring, MD |
| Costa | Daniel | RI Department of Environmental Management | dan.costa@dem.ri.gov | Rhode Island |
| Cowie-Haskell | Ben | NOAA Stellwagen Bank NMS | ben.haskell@noaa.gov | Scituate, MA |
| Delanger | Lanny | Fisherman, Rhode Island | lad0262@aol.com | Saunderstown, RI |
| Doughty | Lynda | Gulf of Maine Lobster Foundation | lynda@gomlf.org | Phippsburg, ME |
| Furman | Nick | Oregon Dungeness Crab Commission | nick@oregondungeness.org | Coos Bay, OR |
| Glass | Chris | Northeast Consortium | chris.glass@unh.edu | New Hampshire |
| Glenn | Bob | Massachusetts Division of Marine Fisheries | robert.glenn@state.ma.us | New Bedford, MA |
| Grafton | Bill | Stellwagen Alive! | wdgrafton@stellwaenalive.org | Scituate, MA |
| Havens | Kirk | Virginia Institute of Marine Science | kirk@vims.edu | Gloucester Point, VA |
| Hofmann | Erin | National Fish and Wildlife Foundation | Erin.Hofmann@NFWF.ORG | Washington, DC |
| Hood | Catherine | Fundy North Fishermen's Association | phocoenas@gmail.com | St. Andrews, New Brunswick |
| Howland | Richard | Fisherman, Islesford, Maine | rhowland@hotmail.com | Islesford, ME |
| Hoyt | Sherm | Maine Sea Grant Cooperative Extension | sherm.hoyt@maine.edu | Waldoboro, ME |
| Hewes | Gerald | USCG Boston | gerald.j.hewes@uscg.mil | Boston, MA |
| Kennedy | Jen | Blue Ocean Society for Ocean Conservation | jen@blueoceansociety.org | New Hampshire |
| Kerns | Toni | Atlantic States Marine Fisheries Commission | tkerns@asmfc.org | Washington, DC |
| Laist | David | Marine Mammal Commission | dlaist@mmc.gov | Bethesda, MD |
| Lang | Jimbo | Fisherman, Georgetown, Maine | Lang98@myfairpoint.net | Georgetown, ME |
| Leask | Joe | Fisherman, Portland, Maine | leask4.0@gmail.com | Beth, ME |
| Ludwig | Laura | Gulf of Maine Lobster Foundation | Laura@gomlf.org | Provincetown, MA |
| Lyons | Casey | Boston Magazine | clyons@bostonmagazine.com | Boston, MA |
| Marcaurelle | Brian | Maine Island Trail Assn. | brian@mita.org | Portland, ME |
| Matthews | Tom | FL Fish and Wildlife Conservation Commission | Tom.Matthews@MyFWC.com | Marathon, FL |
| McDade | John | Fisherman, St. John, New Brunswick | | St. John, New Brunswick |
| McElroy | Bill | Atlantic States Marine Fisheries Commission | FVellenjune@cox.net | Wakefield, RI |
| McKiernan | Dan | Massachusetts Division of Marine Fisheries | dan.mckiernan@state.ma.us | Boston, MA |
| Mechling | Jesse | Provincetown Center for Coastal Studies | jmechling@coastalstudies.org | Provincetown, MA |
| Meehan | Sean | NOAA Restoration Center | sean.meehan@noaa.gov | St. Petersburg, FL |
| Miller | Rachael | Rozalia Project | rachael@rozaliaproject.org | Granville, VT |
| Morison | Sarah | NOAA Marine Debris Program | sarah.morison@noaa.gov | Silver Spring, MD |
| Patterson | Cheri | NH Fish and Game Department | Cheri.Patterson@wildlife.nh.gov | Durham, NH |
| Pazar | Al | Oregon Dungeness Crab Commission | kkfinc@hotmail.com | Florence, OR |
| Pelletier | Erin | Gulf of Maine Lobster Foundation | Erin@gomlf.org | Kennebunk, ME |
| Pico | Michelle | National Fish and Wildlife Foundation | pico@nfwf.org | Oconomowoc, WI |
| Smith | Melissa | ME Department of Marine Resources | Melissa.Smith@maine.gov | Boothbay Harbor, ME |
| Sprague | Alison | NOAA Office of Response and Restoration | alison.sprague@noaa.gov | Seattle, WA |
| Talbot | Alan Major | ME Bureau of Marine Patrol | Alan.Talbot@maine.gov | Hallowell, ME |
| Torrent-Ellis | Theresa | ME Coastal Program | Theresa.Torrent-Ellis@maine.gov | Augusta, ME |
| Towne | Terry | Maine Coast Heritage Trust | ttowne@mcht.org | Mt. Desert, ME |
| Wallace | Nancy | NOAA Marine Debris Program | nancy.wallace@noaa.gov | Silver Spring, MD |

Appendix 3

Workshop Attendees Interest Statements

(This information was voluntarily provided and therefore may not be provided for each participant. For the comprehensive list of attendees see Appendix 2.)

Name: **Sherm Hoyt**

Position Title: Fisheries Outreach Coordinator

Organization: Maine Sea Grant/Cooperative Extension

Description: Community development work with all commercial fisheries in Maine.

Name: **Cheri Patterson**

Position Title: Supervisor of Marine Division

Organization: NH Fish and Game Department

Description: I am the supervisor of the Marine Division of the NH Fish & Game Department. We work closely with the fishing industry in many aspects including derelict gear on the coastal beaches. During the course of the workshop, we would like to gather more information to assist in resolving derelict gear conflicts.

Name: **Owen C. Nichols**

Position Title: Director, Marine Fisheries Research

Organization: Provincetown Center for Coastal Studies

Description: I direct a program in which I work cooperatively with fishermen and shellfish growers to conduct relevant and timely scientific research to address fishery and aquaculture management issues. Among those issues is the effects and mitigation of lost fishing and aquaculture gear – I am interested in collaborative approaches to addressing these issues, working with fishing community members, researchers, and resource managers to characterize, quantify, and mitigate gear loss, particularly in the southern Gulf of Maine. Attending this workshop will help build such collaborations, and I hope to learn more about regulatory and funding issues associated with derelict gear research and recovery.

Name: **Ben Cowie-Haskell**

Position Title: Assistant Superintendent

Organization: Stellwagen Bank National Marine Sanctuary

Description: I've been working with fishermen in Scituate Harbor since 2007 on derelict fishing gear issues. Reducing derelict fishing gear in the Stellwagen Bank sanctuary is an important goal for us. I co-led New England's first DFG workshop in 2008 at the New England Aquarium.

Name: **Rachael Miller**

Position Title: Founder/Director

Organization: Rozalia Project for a Clean Ocean

Description: Rozalia Project's mission is to find and remove marine debris from the surface to the seafloor through action, technology, outreach, and research. We use side scan sonar, ROV's, multi-beam sonar and surface nets to locate and remove derelict fishing gear on the seafloor as well as on the surface.

Name: **Bill Grafton**

Position Title: Board Officer

Organization: Stellwagen Alive!

Description: Stellwagen Alive! Is the recipient of a grant from the Fishing for Energy Fund. Our responsibilities include removal of derelict fishing gear at land base and at sea (Massachusetts coastal waters/ Massachusetts Bay/Cape Cod Bay/Stellwagen Bank National Marine Sanctuaries).

Name: **David Laist**

Position Title: Policy and Program Analyst

Organization: Marine Mammal Commission

Description: I am a member of the Interagency Marine Debris Coordinating Committee and have written several papers reviewing biological effects of marine debris and ghost fishing by derelict fishing gear. I would like to see studies done to investigate the feasibility of using a grappling system to remove lost gill nets in New England.

Name: **Al Pazar**

Position Title: Commissioner/Vessel Owner

Organization: Oregon Dungeness Crab Commission

Description: I am a vessel owner/captain with 40+ years of commercial fishing experience on the West Coast. As a member (and past Chair) of the Oregon Dungeness Crab Commission, I have worked with the Oregon Department of Fish & Wildlife (ODFW) on a NOAA-funded derelict crab gear program, and with the ODCC's current D/G clean-up initiative. I also own a fishery research vessel and work with the scientific community on the West Coast on research project charters.

Name: **Bob Glenn**

Position Title: Senior Marine Fisheries Biologist

Organization: Massachusetts Division of Marine Fisheries

Description: Chief Lobster Biologist in Massachusetts. I am interested in the impacts of derelict fishing gear on lobsters and finfish.

Name: **Dan McKiernan**

Position Title: Deputy Director

Organization: Massachusetts Division of Marine Fisheries

Description: I am the Fishery Manager of the Massachusetts Division of Marine Fisheries. I am interested in impacts to fisheries, management strategies, and legal hurdles to clean up efforts.

Name: **Casey Lyons**

Position Title: Associate Editor

Organization: Boston Magazine

Description: I am a writer and editor for Boston Magazine with a standing interest in ocean issue. I am currently working on a story about derelict fishing gear for an upcoming issue and am keen to stay up-to-date on what is new with ghost gear.

Name: **Gabriela M. Bradt**

Position Title: Fisheries Program Assistant

Organization: UNH Cooperation Extension

Description: I work for the UNH Cooperation Extension Fisheries program and I will be assisting Blue Ocean Society with their Marine Debris project.

Name: **Theresa Torrent-Ellis**

Position Title: Senior Planner

Organization: Maine Coastal Program

Description: I coordinate the annual Coastweek Cleanup for Maine. In this capacity I have been working on solutions for addressing derelict gear in Maine for a number of years, including establishing a protocol in collaboration with the Maine Marine Patrol for obtaining permission to handle licensed gear that is protected under Maine State law from molestation by a second party. This workshop is a unique opportunity to collaborate with other stakeholders in NE who are addressing derelict fishing gear.

Name: **Dr. Kirk J. Havens**

Position Title: Director, Coastal Watersheds Program

Organization: Virginia Institute of Marine Science, College of William & Mary

Description: Invited Speaker. I manage the nation's largest derelict fishing gear removal program which is a partnership between fishermen, state regulatory agency personnel, and scientists http://ccrm.vims.edu/marine_debris_removal/index.html.

Name: **Catherine Hood**

Position Title: Marine Researcher Scientist

Organization: Fundy North Fishermen's Association

Description: My current research is focused on derelict fishing gear present in the Bay of Fundy and specifically Lobster Fishing Area 36. I am completing a survey of fishermen both lobster and gillnet harvesters to identify where they have lost gear in LFA 36. These data will be placed on maps of the area along with sightings of Northern Right Whale to determine co-occurrence. Data will be analyzed to determine the area of LFA 36 with the greatest amount or density of lost gear according to the survey answers from fishermen. The ideal situation would be to remove the gear in the near future. I hope to learn how others have achieved this goal and the process and equipment used.

Name: **Marcus Jones**

Position Title: Captain, Owner

Organization: M.L.A.

Description: As a Fisherman who uses many types of fishing gear and methods, loss or recovery of gear is always an important issue. Also, with literally thousands of families depending on the Oceans for livelihood its ecosystem is vitally important to not only keep clean, but also to maintain it as best we can for future generations to come. Thank you for this opportunity.

Name: **Nick Furman**

Position Title: Executive Director

Organization: Oregon Dungeness Crab Commission (ODCC)

Description: The ODCC is an industry-funded commodity commission that works on behalf of Oregon's Dungeness crab industry. We have worked with the crab fleet on derelict gear recovery efforts for the past three years and currently have an industry-supported D/G program in placed along the Oregon Coast. We've been asked to share some of our experiences in the program as panelists at the workshop.

Name: **Brian Marcaurelle**

Position Title: Program Director

Organization: Maine Island Trail Association

Description: I oversee MITA's island stewardship programs, which have a strong focus on reducing marine debris from Maine's shorelines and waterways. MITA hosts dozens of island cleanup events annually, and encourages all boaters to incorporate marine debris cleanup into their recreational outings. Though studies, we've found that 2/3 of all marine debris on the shores of Maine's island is derelict fishing gear or related items (traps, buoys, line, bait bags, totes, etc). Maine's strict "molestation" laws make cleanup of this debris tremendously complicated. Through this workshop, we hope to begin exploring steps that can be taken to make cleanup of shoreline derelict fishing gear more simple in Maine.

Name: **Christopher Glass**

Position Title: Director, Northeast Consortium

Organization: Northeast Consortium, University of New Hampshire

Description: The Northeast Consortium promotes and funds collaborative research programs in the ecosystems of the Gulf of Maine and Georges Bank. Derelict Fishing gear and its removal is an important component of the mission of the Consortium.

Name: **Lanny Dellinger**

Position Title: President

Organization: Rhode Island Lobsterman's Association

Description: As president of the Rhode Island Lobsterman's Association and an active lobsterman, I am aware of the problem associated with derelict lobster gear. I am hoping to learn of programs that could help the lobster industry dispose of this gear.

Name: **Daniel Costa**

Position Title: Principal Property Management Officer

Organization: Rhode Island Department of Environmental Management, Coastal Resources Division

Description: I am the Port Manager of Galilee and Pier 9 Newport. I oversee the berthing property leasing and

state infrastructure at these ports. As these ports are dedicated to commercial fisheries and business in support of commercial fisheries, unwanted gear is an issue. Currently there are dedicated dumpsters to dispose of gear that are provided by Covanta / NFWF at these ports.

Name: **Jen Kennedy**

Position Title: Executive Director

Organization: Blue Ocean Society for Marine Conservation

Description: I would like to learn more about other projects related to derelict fishing gear and to gain ideas and inspiration we can apply to our work in the Gulf of Maine (most specifically, New Hampshire) and possibly form partnerships to more effectively utilize limited resources.

Name: **Erin Hofmann**

Position Title: Manager, Marine Conservation

Organization: National Fish and Wildlife Foundation

Description: I would like to identify priorities in addressing derelict fishing gear in New England, as identified by the various stakeholders, in order to determine potential future funding priorities and strategies.

Name: **Jeffrey Brodeur**

Position Title: Communications and Outreach Specialist

Organization: Woods Hole Sea Grant

Description: I am seeking to further develop and implement collaborative efforts aimed at mitigating derelict fishing gear and other marine debris in New England, especially southeastern Massachusetts.

Name: **Sarah Morison**

Position Title: Deputy Division Chief and East Coast Coordinator

Organization: NOAA Marine Debris Program

Description: As the NOAA Marine Debris Program East Coast Coordinator, it is part of my responsibility to facilitate communication and coordination to address marine debris along the East Coast.

Name: **Erin Pelletier**

Position Title: Executive Director

Organization: Gulf of Maine Lobster Foundation

Description: The Gulf of Maine Lobster Foundation (GOMLF) is a 501 (c) 3 non-profit that works collaboratively with fishermen to organize at-sea and voluntary derelict fishing gear recovery and disposal projects in Maine. With funding from National Fish and Wildlife Foundation and NOAA Marine Debris Program we have successfully recovered over 3,300 submerged traps and collected over 2,300 unwanted traps from our voluntary clean up days, for a total of 5,500 traps recovered, returned or recycled. GOMLF is continuing the at-sea gear recovery efforts in 2012 and 2013 and expanding our outreach to local fishing communities for additional shoreline derelict fishing gear recovery.

Name: **Bob Glenn**

Position Title: Senior Marine Fisheries Biologist

Organization: Massachusetts Division of Marine Debris

Description: I am attending to share the results of a two year study on the impacts of ghost fishing from derelict lobsters traps and to gain a regional perspective on the derelict fishing gear issue.

Name: **Terry Towne**

Position Title: Regional Steward

Organization: Maine Coast Heritage Trust

Description: Maine Coast Heritage Trust may very well be the largest landowner of marine shoreline in the state of Maine. We are hugely affected by derelict fishing gear washing onto our shores; as a result, we spend thousands of dollars and hundreds of staff and volunteer hours to address the adverse impacts.

Name: **Sean Meehan**

Position Title: Marine Habitat Restoration Specialist

Organization: NOAA Restoration Center

Description: I will be facilitating the workshop.

Appendix 4

Workshop Participant Evaluation Comments

Somewhat overwhelmed by the magnitude and complexity of the problem and related issues here in the Northeast. Fishermen sentiment is very similar to feelings held and expressed in Oregon. Funding, incentives and “keep it simple” approaches are a common denominator and should be explored/built on. Enjoyed the opportunity to meet, share and learn... Good job.

Thought this was very well executed.

A good workshop to get people involved in the room. It exceeded my expectations. I hope this can move forward and continue to have fishermen in the conversation. I look forward to the next steps.

This was a very good first step to ID the scope of the issue and the possible resolutions. Keep in mind, everyone thinks that this is either a money grab or they are protecting their own self interest. This issue has simple solutions. Outreach, outlets, and support can solve a lot of the issues. I would not have done things much differently. Good job.

Good flexibility allowed for input from all sectors, thanks. (Great fruit/snacks!)

I had some great work group conversations on funding opportunities...efficacy of fees for groups to create sustainable funding. Excellent workshop because it was well-facilitated and had the right mix of people. We need a forum to share lessons learned. Thank you.

This was a great workshop. I came in with very little specific knowledge and left feeling like I could explain the views of all parties.

Thank you for your work creating, planning and running (and funding) this workshop! For me, it was excellent – I met a lot of people it would have been hard (or taken a long time) for me to meet and I learned a lot.

My suggestion would be to reduce some of the time spent re-capping from the group sessions (reading the stickies, for example). Then there would be more time for group (large or small) discussion, which was excellent! And then, we can see all of the small group results the next day or in follow-up material. Overall-great work!

Good step in the right direction. Build on this workshop...

Next workshop incorporate a mock DFG removal project from inception to final/closure report.

Include chart review...

Include approaching municipal, state and federal agencies...

Come up with proper messaging

Good forum, was glad to see similar projects happening south of us. Hopefully action items can be acted upon.

Liked the energy but I felt the conference was too procedural. The constraints of the exercises ended up stifling good conversation. The last ½ hour Tuesday afternoon was the most interesting and productive part of the conference (i.e., open dialogue). We need more of that next time and fewer exercises.

*Need **more** fishermen involved. DFG is a problem created due to their activity. More work on ID'ing the extent of problem.*