

CHANNEL ISLANDS NATIONAL MARINE SANCTUARY ADVISORY COUNCIL

***Marine Shipping Working Group***

**Grading Subcommittee Webinar**

**Webinar Summary**

**August 11, 2015**

*At the June 29, 2015 meeting, the Marine Shipping Working Group (MSWG) reviewed six preliminary management option ideas. Members acknowledged that all address, at some level, one or more of the goals established for the working group's deliberations. In order to gain an overall perspective of how well different management options perform with regard to the four goals of the MSWG, members agreed that a grading system should be developed for these proposals to facilitate further discussion toward the ultimate goal of providing working group recommendations. The MSWG delegated a small ad hoc subcommittee composed of working group members and NOAA staff to develop, use, and discuss an appropriate grading system. On August 11, 2015, the subcommittee convened via webinar to review the grades received for each preliminary management option idea.*

**Attendance**

- Nine Marine Shipping Working Group (MSWG) members (or alternates) participated in the Grading Subcommittee Webinar. See attached attendance roster (Appendix 1)

**General Feedback on Grading Approach**

- Janet Thomson, Kearns & West facilitator, opened the webinar with a discussion of feedback from MSWG members on the proposed grading approach. Eight MSWG members had previously provided feedback on the grading approach via email. Five members indicated support for the approach, and three had substantive questions and/or concerns.
- John Ugoretz, Department of Defense, described a problem that he had with the grading approach. In his view, the approach reflects different stakeholders' assumptions, which leads to many areas of disagreement. Other MSWG members agreed that while the grading approach does reflect individual perspectives and areas of disagreement, this can be valuable because it may improve communication about the concepts among MSWG members.
- Jessica Redfern, National Marine Fisheries Service, noted that the comments that MSWG members included with their grading matrices are important and should be included in any summary document. She also stated that more in-depth analysis (beyond that which is included in SeaSketch) of the management options is needed, and questioned where that may fit into the MSWG process.
- Janet Thomson asked the group for their input on the recommendation that the management options be evaluated with additional criteria, such as feasibility and data needs. The group agreed to review the grading results as is, and then potentially add additional criteria in a second round of review. One MSWG member suggested that if additional criteria are added, they should be clearly measurable.

**Discussion of Grades for Preliminary Management Option Ideas**

*Prior to the August 11<sup>th</sup> webinar, nine people individually applied the following red-yellow-green criteria to assess how well each preliminary management option performs with regard to the four goals of the MSWG:*

- *Red signifies that the proposal has a negative impact on a goal*
- *Yellow signifies that the proposal does not address a particular goal or has neither a positive nor negative impact on a particular goal*
- *Green signifies that the proposal has a positive impact on a particular goal*

Below are summary tables for each preliminary management option. Discussion points from the August 11<sup>th</sup> webinar are captured below each table.

**OPTION 1 – Status Quo**

	<b>Goal 1: Reduce Risk of Ship Strikes</b>	<b>Goal 2: Decrease Air Pollution and GHGs</b>	<b>Goal 3: Improve Navigational Safety and Shipping Efficiency</b>	<b>Goal 4: Minimize naval ops interruptions and other ocean user conflicts</b>	<b>Comments</b>
<b>Birney</b>					
<b>Byrd</b>					
<b>Calambokidis</b>					Yellow by definition since no change
<b>Garrett</b>					
<b>Metcalf</b>					
<b>Redfern</b>					
<b>Silber</b>					
<b>Smith</b>				Green (High)	
<b>Ugoretz</b>					

- Silber stated that he thought the status quo is not currently working for the Navy.
  - Ugoretz replied that the status quo would not improve or worsen the current impacts.
- Smith explained that the status quo appears to be a great option for the Navy in comparison to other options.
- Garrett asked Ugoretz how many interruptions of Naval operation have occurred since 2009.
  - Ugoretz replied that one operation was delayed immediately after the California Air Resources Board adopted fuel regulations in regulated California waters out to 24 nautical miles. He explained that since then, the Navy has worked with the Marine Exchange of Southern California to communicate with ships to avoid interruptions.
- Sean Hastings, sanctuary staff, noted that it is important for the MSWG to understand the communication strategies that the Navy and the Marine Exchange have put in place under the current status quo to mitigate potential impacts of shipping activity on Naval operations.
  - Walt Schobel, Department of Defense, explained that 10-20% of ships—primarily those from smaller companies—are not in communication with the Marine Exchange and may cause issues on the Sea Range.
  - Garrett also noted that there are some ships coming from the south Pacific that don't receive messages from the Marine Exchange. He recommended that the group discuss this further with Capt. Kip Louttit, Marine Exchange of Southern California, to determine what has worked to date and what could be done to improve communications.

**OPTION 2 – Shipping Lane Idea: Establish Western TSS South of the Channel Islands**  
(USCG PARS Study 2011)

	<b>Goal 1: Reduce Risk of Ship Strikes</b>	<b>Goal 2: Decrease Air Pollution and GHGs</b>	<b>Goal 3: Improve Navigational Safety and Shipping Efficiency</b>	<b>Goal 4: Minimize naval ops interruptions and other ocean user conflicts</b>	<b>Comments</b>
<b>Birney</b>					
<b>Byrd</b>				Ships are already using this route. It could potentially benefit the Navy because routes would be better defined.	While routes outside the SB Channel move air emissions further offshore SB County, these emissions will affect areas south of us, due to wind patterns.
<b>Calambokidis</b>		Green since farther from shore.	Green since ship routes are better defined.	Yellow given that there are negotiations with the Navy to minimize impacts.	Graded this option assuming route would not necessarily match exact route shown, but represent the most efficient route for ships, avoid whale concentrations, and be negotiated with the Navy to least impact their activities (option recently discussed with Dep Asst Sec of Navy).
<b>Garrett</b>	Would not appreciably alter status quo	Longer route	Would not appreciably alter status quo	Would create a conflict zone with the Navy	
<b>Metcalf</b>					
<b>Redfern</b>					
<b>Silber</b>					Don't know overall benefit. Depends on analysis to determine pros/cons.
<b>Smith</b>	Green (Medium)	Green (Medium)	Green (Medium)		
<b>Ugoretz</b>					

- Garrett and Metcalf stated that they gave this proposal a “red” for goal 4 because a TSS south of the Channel Islands would create an institutionalized, internationally recognized vessel traffic system through the Sea Range and likely drive additional traffic to that area.
- Garrett and Metcalf explained that they gave this proposal a “red” for goal 2 because if you direct ships to the south, they have to go a longer route and there is an increase in emissions, and given the wind patterns, these emissions still land in California.
  - Byrd noted that one of the key assumptions that people are making is that establishing a TSS south of the Channel Islands is going to increase ship traffic in that area. She explained that with the status quo, there are already ships south of the islands. She is assuming that a TSS

- south of the islands wouldn't increase ship traffic, but would organize the traffic that is already there.
- Garrett and Metcalf stated that on the basis of that assumption, they would change their grades to a "yellow" for goal 2.
  - Ugoretz noted that comments from Santa Barbara Air Pollution Control District indicate that the location of air emissions is irrelevant because it is going to land somewhere (even if it is outside of Santa Barbara County) and have impacts on local air quality. Thus, he concludes, you can't address goal 2 through spatial changes such as new lanes.
    - One MSWG member clarified that spatial changes like new lanes can negatively impact air quality if they change shipping behavior and increase route length.
    - Byrd noted that this goes back to the question of whether creating a shipping lane south of the islands would promote more traffic in that area, or organize the existing traffic.
    - Garrett provided a link to the final version of a relevant air quality report released in November 2000: "[Air Quality Impacts from NOx Emissions of Two Potential Marine Vessel Control Strategies in the South Coast Air Basin](#)"
  - Redfern noted that after hearing this discussion, she would change her grade for goal 2 from "green" to "yellow." She also said that the group should analyze shipping traffic patterns in the region and simulate changes in traffic patterns based on new lane implementation. This could help determine which assumption the MSWG should operate under moving forward.
  - Hastings recommended adding in seasonality and/or additional factors such as purposefully directing all traffic into the Santa Barbara Channel when the Navy is utilizing the Sea Range and/or directing traffic to the south side of the islands if there are large numbers of whales in the Santa Barbara Channel.
  - Silber stated that he did not have enough information to say that this measure would reduce ship strikes.
  - Redfern explained that she gave this option a "green" for goal 1 based on the publication, *Assessing the Risk of Ships Striking Large Whales in Marine Spatial Planning* (Redfern et al. 2013), which indicates that while "the route with the lowest risk for humpback whales had the highest risk for fin whales, and vice versa... risk to both species may be ameliorated by creating a new route south of the northern Channel Islands and spreading traffic between this new route and the existing route in the Santa Barbara Channel."<sup>1</sup>
    - Redfern stated that this lane in option 2 is not the ideal configuration to reduce co-occurrence of ships and whales, and one would need to combine the biologically important areas, tagging data, habitat models, and observation data to design the best route south of the islands.
    - Redfern said that an action item from this webinar is for Calambokidis and Redfern to discuss timeline and what is needed to do the proper analysis to design an optimal shipping lane south of the islands to reduce the threat of ship strikes.
    - Hastings stated that from the larger NOAA perspective, this work needs to be done, even if it is outside of the MSWG timeline.
    - Ugoretz commented that it was his understanding from the *Redfern et al. 2013* publication that, compared to all traffic utilizing the Santa Barbara Channel, the risk to fin whales is greater in southern routes, the risk to blue whales is approximately the same, and the risk to humpbacks is decreased.
    - Redfern clarified that while a southern route does pose a higher risk to fin whales compared to all traffic utilizing the SB Channel, there are currently ships that do not use the SB Channel TSS and are transiting south of the islands in a broad, unorganized pattern. Thus, compared to the status quo, there may be a way to ameliorate the risk of ship strikes to both humpback whales and fin whales by drawing an optimized shipping lane in the appropriate location south of the islands. Ugoretz's perspective is that, based on *Redfern et al. 2013*, no lane south of the

---

<sup>1</sup> [http://www.noaa.gov/iea/Assets/iea/california/Report/pdf/19.AppendixMS2013-07\\_RedfernShipstrike\\_FINAL.pdf](http://www.noaa.gov/iea/Assets/iea/california/Report/pdf/19.AppendixMS2013-07_RedfernShipstrike_FINAL.pdf)

- islands would be better than the existing lanes in the SB Channel for fin whales. However, if a lane were developed south of the islands, you could select one that is optimized for fin whales.
- Garrett recommended designing an optimal routing scheme for each species (humpbacks, fins, and blues) separately.
  - Smith noted that some populations of whales can withstand more take than others.

**OPTION 3 – Shipping Lane Idea: Make Voluntary Western Lane an Official TSS**  
(Previously called Permanent Western Lane)

	Goal 1: Reduce Risk of Ship Strikes	Goal 2: Decrease Air Pollution and GHGs	Goal 3: Improve Navigational Safety and Shipping Efficiency	Goal 4: Minimize naval ops interruptions and other ocean user conflicts	Comments
<b>Birney</b>			Might be red for tankers to EI Segundo but others yellow		
<b>Byrd</b>					
<b>Calambokidis</b>					This was scored yellow because it represented little change from status quo and was very short lane.
<b>Garrett</b>	Would not appreciably alter the status quo.	Longer route.	Would not appreciably alter the status quo.	Would create a conflict zone with the Navy.	
<b>Metcalf</b>					
<b>Redfern</b>					
<b>Silber</b>					Don't know overall benefit. Depends on analysis to determine pros/cons.
<b>Smith</b>		Green (Low)	Green (Medium)		
<b>Ugoretz</b>					

- Byrd noted that the “green” for goal 3 isn’t a strong “green” and could be changed to a “yellow.”
- Garrett stated that this option would not increase navigational safety, it might actually decrease it, because TSSs are usually implemented in congested and constrained areas.
- Smith explained that he would consider changing the “greens” for goal 2 and goal 3 to “yellows.” He noted that if the working group is concerned with air pollution in general (rather than just in SB County), then he can appreciate that moving ships around doesn’t do anything to change that.
- Byrd stated that we don’t want to pass air pollution to our neighbors to the south of us, and models have shown that routes south of if islands would send more air pollution to the south.
  - Smith responded that if we are looking at air pollution generally (and not just air pollution specific to the SBAPCD area) then we only care about ship speed and distance.
- Garrett noted that there was a study in 1999 where tracers were released in the air, and the study showed that predominant wind patterns are to the south.

**OPTION 4 – Shipping Lane Idea: Bathymetric Feature Avoidance**

	<b>Goal 1: Reduce Risk of Ship Strikes</b>	<b>Goal 2: Decrease Air Pollution and GHGs</b>	<b>Goal 3: Improve Navigational Safety and Shipping Efficiency</b>	<b>Goal 4: Minimize naval ops interruptions and other ocean user conflicts</b>	<b>Comments</b>
<b>Birney</b>					
<b>Byrd</b>		Longer route, so ships will likely need to travel further distances at higher speeds, which could lead to a modest increase in air emissions. May actively encourage ships to transit outside the channel.	Longer route leads to more fuel use, but designated route might improve navigational safety.		While routes outside the SB Channel move air emissions further offshore SB County, these emissions will affect areas south of us, due to wind patterns.
<b>Calambokidis</b>		Yellow since farther from shore but longer with turns.	Red because longer with turns		Graded poorer in current form since bathymetric feature is not the best basis for setting a lane. Could be modified as described in comments for Option 2.
<b>Garrett</b>	Unknown	Longer route	Potential increased risk of vessel collision	Would create a conflict zone with the Navy.	
<b>Metcalf</b>					
<b>Redfern</b>					
<b>Silber</b>					Depends on analysis to determine pros/cons.
<b>Smith</b>	Green (medium)	Green (medium)	Green (medium)		
<b>Ugoretz</b>					

- Thomson summarized that the six people who graded it “red” for goal 3 did so because without clear navigational aids, it is difficult for ships to maintain the route. Garrett added that the main navigational safety issue is requiring turns away from visual navigational aids, such as with this bathymetric feature avoidance option.
- Metcalf noted that there are real, legal reasons why large commercial vessels should always use a TSS, because if they’re not using it and they have an accident, there are major liabilities.
- Metcalf and Garrett explained that they gave this management option a “red” for goal 4 because it gives ships the right to go through the Sea Range unencumbered.

- Smith requested further clarification about the navigational safety issue, because Metcalf's comments may suggest that navigational safety might improve if ships are using designated lanes and are insured against specific types of accidents.
  - Metcalf responded that from her understanding, there is relatively low density shipping traffic there anyway, so there is plenty of space. TSSs are usually created for constrained areas where there is a lot of traffic, for example, the Santa Barbara Channel. This TSS would actually put ships closer together than they are already because it's not a constrained area of the ocean. This would force ships to be in closer proximity.
  - Ugoretz added that if ships are far apart, it is disadvantageous to bring them closer together. This leads to a greater risk of collision.
- Redfern noted that when the traffic shifted south of the islands after the CARB rule in 2009, the Coast Guard initiated a Port Access Routing Study, and she thought that was because there were concerns about maritime safety for traffic south of the islands.
- Hastings stated that from this conversation he hears a question forming for both Kip Louttit and the Coast Guard: What has changed since 2009 that informs Kip's opinion that there is now no navigational safety concern with the existing traffic south of the islands (see Kip's comments in Supplemental Document)? What is the Coast Guard's perspective?
  - He also noted: What are the criteria used in devising safe navigation, so that they can be built in to future iterations?
- Smith explained that he graded this option as "green" for goal 1 (with the caveat that Redfern mentioned that the specific design of the lane would need to be optimized to reduce co-occurrence with whales) for the following reasons:
  - Avoids biologically important areas (areas where whales are feeding, mating, and migrating) for blue and humpback whales.
  - Minimizes overlap with predicted high density areas for blue whales and humpback whales.
  - Avoids areas in the SB Channel with a high number of sightings for blue, humpback and gray whales.
  - Minimizes overlap with biologically important migratory areas for gray whales. Gray whale densities are predicted to be lower in these areas than within 10 km of the coast and comprise a lower proportion of mother calf pairs.
  - With respect to fin whales, you can minimize the overlap with important bathymetric features likely to be associated with fin whale aggregations within the high density areas that have been identified that you would be going through, but that is the fine tuning that Redfern has been talking about.
- Thomson noted that two takeaways are the navigational safety issue and also that bathymetric features may be one of the better ways to avoid ship strikes.
- Redfern stated that moving forward she wants to make sure that Hasting's point isn't lost. There is an assumption that shipping south of the islands is safe, but there was a Port Access Routing Study (PARS) that was initiated over concerns for maritime safety. This issue remains unresolved for her, and it would be helpful to understand it better.
  - Smith agreed.
  - Ugoretz noted that one part of that answer is that shipping is not static, and the PARS study was initiated when the vast majority of ships had departed the SB Channel and were transiting the southern route. Since then, some ships have returned to the SB Channel and decreased the total number of vessels transiting the southern route, which decreased the potential for conflict. Since the IMO rule went into effect this year, fewer ships are transiting the area at all, which has further reduced the potential for conflict.
- Redfern said that it makes sense to try to draw an optimized route south of the islands.

**OPTION 5 – Seasonal Management Area Idea: VSR Seasonal Inside and Outside Channel**

	<b>Goal 1: Reduce Risk of Ship Strikes</b>	<b>Goal 2: Decrease Air Pollution and GHGs</b>	<b>Goal 3: Improve Navigational Safety and Shipping Efficiency</b>	<b>Goal 4: Minimize naval ops interruptions and other ocean user conflicts</b>	<b>Comments</b>
<b>Birney</b>					
<b>Byrd</b>					Planned VSR is best for AQ - it allows for advanced planning, so reduced speeds can be incorporated into schedules, rather than relying on speed up.
<b>Calambokidis</b>					Scored based on voluntary basis, which would result in status quo since voluntary measures have not worked.
<b>Garrett</b>	Longer times in proximity to whales increases risks of morbidity and mortality to a whale at the speeds under consideration.	Speed increases outside of the zone would negate benefits.	Would be a negative impact on vessel efficiencies.	Not only would it conflict with the Navy, it would extend the duration of conflict.	
<b>Metcalf</b>					
<b>Redfern</b>					
<b>Silber</b>					If this is a voluntary system it may have little overall benefit. It gets a green for whale strikes if mandatory.
<b>Smith</b>	Green (Low)	Green (High)			
<b>Ugoretz</b>					

- Thomson noted that looking through the comments received, there were two major issues at play for this management option. One was the potentially voluntary nature of the speed reductions. Second, there was debate whether speed reduction below the speeds that ships are already going is useful or not.
- Smith stated that if VSR is voluntary with no incentives (and no behavior change), he would grade this option as “yellow” for goal 1. However, recognizing that there are some advantages with incentivization, if there was any slow down at all, there would be some marginal benefit for whales.
- Silber gave it a “yellow” for goal 1 because it is voluntary. There is plenty of evidence that very few people would adhere to it.
- Redfern also gave it a “yellow” for goal 1 because it is voluntary.

- Garrett said that the primary issue is that any type of a speed reduction doesn't really reduce the risk of a strike. It probably increases the risk because you're in proximity to the whale for a longer period of time. At the speeds we're talking about (10-12 kts), there isn't an appreciable survival response that would make it worthwhile. What we need to do is keep ships and whales apart.
- Smith noted that Silber's presentation at the previous MSWG meeting about the results of speed reduction on the east coast stated that for reasons they cannot specifically identify, existence of and adherence to VSR led to reduced risk of ship strike.
  - Silber said that that is correct.
- Silber stated that people have previously suggested that VSR could increase the risk of ship strikes due to longer times in proximity to whales. They have tried to look at it statistically, but the premise doesn't hold up when analyzed. There is very little information on the whales that get hit and swim away. The data are quite strong on the reduction of fatal ship strikes from VSR that is adhered to. There are quite a few papers published stating that speed restrictions do work. The main issue is that voluntary measures will not be adhered to.

**OPTION 6 – Dynamic Management Area Idea: AIS Whale Warning Zone**

	Goal 1: Reduce Risk of Ship Strikes	Goal 2: Decrease Air Pollution and GHGs	Goal 3: Improve Navigational Safety and Shipping Efficiency	Goal 4: Minimize naval ops interruptions and other ocean user conflicts	Comments
Birney	Green	Green	Yellow	Yellow	
Byrd	Green	Red DMAs: without advanced planning opportunity, speed up is virtually guaranteed.	Red	Yellow	
Calambokidis	Yellow	Green	Yellow	Red	Whale benefit is possible but unclear if system would work since many of the approaches are problematic. Adds uncertainty and less predictability to ships and potential interference.
Garrett	Green Totally depends on having the resources to implement and the effectiveness of those measures to reduce strikes.	Yellow Would not appreciably alter the status quo.	Yellow Would not appreciably alter the status quo.	Yellow Would not appreciably alter the status quo.	
Metcalf	Green	Yellow	Yellow	Yellow	
Redfern	Yellow	Green	Yellow	Red	
Silber	Red	Yellow	Yellow	Yellow	As a voluntary system, would likely have little or no effect on reducing whale strikes. Transmitting a message by AIS is likely not feasible. Little overall benefit.
Smith	Yellow w/ TSS	Red w/o TSS	Yellow	Green	
Ugoretz	Green	Yellow	Yellow	Yellow	

- Silber asked if this is voluntary.
  - Smith said that this proposal says “recommendation” so it is purely voluntary.
  - Silber explained that is why he gave it a “red” for goal 1.
- Ugoretz stated that if someone declines to do something different, then that would be the same as the status quo, so it would not increase the risk of ship strike, it would keep it the same.
  - Silber said, “fair enough.”

- Smith explained that he gave it a “red” for goal 1 because he thought it would replace the existing TSS in the SB Channel
  - Ugoretz replied that removing the existing TSS was not the original intent, and Garrett asserted that that would never happen, due to the TSS being under international treaty.
- Garrett stated that he gave this one a “green” for goal 1 because, to the extent that it works, it would be positive for whales.
- Byrd stated that in grading this option as “green” for goal 1, she was assuming that incentives could be used to make the voluntary approach work. She also explained that the “red” for goal 2 is because she assumes that dynamic management may inherently increase the risk of speed up because shippers are unable to plan for VSR.
  - Garrett responded that ship speed up is going to happen anyway. If ships are trying to stay on schedule, they are going to speed up. If they have to divert for a storm or something like that, they’re going to make up the time somewhere.

**OPTION 7 – Multi-Part Management Idea: Area of Interest, DMA, SMA, and TSS**

	<b>Goal 1: Reduce Risk of Ship Strikes</b>	<b>Goal 2: Decrease Air Pollution and GHGs</b>	<b>Goal 3: Improve Navigational Safety and Shipping Efficiency</b>	<b>Goal 4: Minimize naval ops interruptions and other ocean user conflicts</b>	<b>Comments</b>
<b>Birney</b>					
<b>Byrd</b>		DMA inherently involves an inability to design a schedule months ahead of time that would avoid speed-ups, which would increase emissions			
<b>Calambokidis</b>					This has good potential benefits to whales if route is determined as described for Option 2 and could mitigate impacts to Navy.
<b>Garrett</b>	Assumes presence of whales in Channel means there aren't whales outside. How do you know you aren't redirecting vessel into the path of more whales?	Longer route and speed increase outside zone offset benefits.	Potential increased risk of vessel collisions	Not only would it conflict with the Navy, it would extend the duration of conflict.	
<b>Metcalf</b>					
<b>Redfern</b>					
<b>Silber</b>					Don't know overall benefit. Depends on analysis to determine pros/cons. If voluntary likely little benefit in reducing strikes.
<b>Smith</b>	Green (Medium)	Green (Medium)			
<b>Ugoretz</b>					

- Due to time constraints, Garrett suggested that the group move forward to discuss option 8, because option 7 is a “hodgepodge” of everything else that was discussed already.
- Birney pointed out that a key difference between option 7 and the other options discussed is that the SMAs and DMAs in option 7 are not voluntary.

**OPTION 8 – Speed Reduction Zone Idea: VSR**

	<b>Goal 1: Reduce Risk of Ship Strikes</b>	<b>Goal 2: Decrease Air Pollution and GHGs</b>	<b>Goal 3: Improve Navigational Safety and Shipping Efficiency</b>	<b>Goal 4: Minimize naval ops interruptions and other ocean user conflicts</b>	<b>Comments</b>
<b>Birney</b>					
<b>Byrd</b>				This would encourage ships to transit the channel to save time and fuel, due to a smaller travel distance.	
<b>Calambokidis</b>					
<b>Garrett</b>	Longer times in proximity to whales increases risks of morbidity and mortality to a whale at the speeds under consideration.	Speed increases outside of the zone would negate benefits.	Lower speeds for some vessels may effect steerage, will effect operations at ports	Not only would it conflict with the Navy, it would extend the duration of conflict.	
<b>Metcalf</b>					
<b>Redfern</b>					
<b>Silber</b>					
<b>Smith</b>	Green (Low)	Green (Medium)		Green (High)	
<b>Ugoretz</b>					

- Subcommittee members (primarily Garrett and Silber) had a lengthy discussion about the extent to which decreasing ship speeds affect whale strikes and whale mortality. Silber noted that data indicate that at 12 knots, relative to 17-20 knots, the probability of a fatal ship strike is reduced by about 40-50%. Still, a direct strike at 5 knots is likely to be fatal. Silber confirmed that as speeds decrease, there is a corresponding decrease in the risk of ship strikes. The primary way to avoid strikes is to ensure that ships and whales are not in the same location, via ship routing measures. Where that is not possible, decreasing speeds is the next best known option.
- Hastings stated that in the SB Channel, they’ve already moved the TSS, so they don’t have any other options aside from reducing speed. NOAA has tried vessel speed reduction on a voluntary basis, which has been unsuccessful. The sanctuary is interested and has asked this group to consider all the various shipping management options that come in to play here, which includes routing and speed. In this world of trying to reduce risk and conserve species, the Sanctuary takes conservation benefit whenever it can get it. If there is a marginal benefit from reduced speeds, there is still value.

- Silber said he isn't saying the group needs to go out and implement this plan tomorrow. He thinks there are other steps that should be taken to look at this more closely. In a vacuum, would this be an effective measure? Of this list of eight options, it would probably be one of the best ones in his opinion.

### **Next Steps for Management Option Ideas**

- Thomson explained that over the next 4-6 weeks, the group needs to come up with a more refined set of management options given the new information we've gained from exploring the existing options.
- The group discussed how to move forward if one or multiple working group members are "red lighting" an option. Should that option no longer be considered? It was agreed that it is not appropriate for the grading subgroup to remove options from the table at this time, and that the full working group will need to evaluate and decide. It was also agreed that another round of grading is not necessary at this time.

**Appendix 1: Grading Subcommittee Attendance**

Kathy Metcalf	Chamber of Shipping of America
Kristi Birney (Co-Chair)	Environmental Defense Center
Jessica Redfern	National Marine Fisheries Service
Zak Smith	Natural Resources Defense Council
TL Garrett	Pacific Merchant Shipping Association
Mary Byrd	Santa Barbara County Air Pollution Control District
John Ugoretz	Dept. of Defense – U.S. Navy
Walt Schobel	Dept. Of Defense – U.S. Air Force (alternate)
Phyllis Grifman (Co-Chair)	USC Sea Grant

Also in attendance: Greg Silber, National Marine Fisheries Service (NOAA); Kristen Hislop (Environmental Defense Center); sanctuary staff Morgan Visalli and Sean Hastings; SeaSketch staff Grace Goldberg; and Kearns & West facilitator Janet Thomson.

**Supplemental Document: Written Feedback from MSWG Members on Preliminary Management Options and Proposed Grading System (August 2015)**

*Only feedback that was originally shared with the **entire** Marine Shipping Working Group by the author is included in this document.*

**Comments from John Ugoretz (U.S. Navy) to MSWG**

**Sent via email August 5, 2015**

I have some fairly significant concerns both with the proposed grading system and the path it seems to lead the MSWG onto.

With regards to the grading system:

Any "red/yellow/green" approach seems to arbitrarily push forward ideas with no benefits (e.g., yellows) - which would lead to selecting status quo, which by its very nature does not increase or decrease any of the goals. You almost have to grade on how "well" something achieves a goal, but with the goals as stated that is also quite arbitrary and cannot be consistently used by all stakeholders.

I attempted to use the rating system (attached). Not surprisingly, in my assessment the only option that has no "red" for the Navy is my own proposal. Based on the lack of red, and a benefit to whales, it would appear to "win". I don't think that is true and doubt others would either.

With regards to the choices on the table right now:

Any approach that uses new shipping lanes is not only beyond the purview and abilities of the Sanctuary to manage, but also neglects the key fact that data on whale locations are too limited to say that there will be a benefit to whales. In fact, the data that do exist seem to point to an increased risk for some species if you move and a decrease to others. Frankly, playing "choose your favorite lane" will likely just drag the MSWG into arguments that should be avoided.

It seemed like the MSWG was getting to a point towards the end of our last meeting where we were really starting to discuss what sorts of data gaps exist and what sorts of technologies might be used to fill those gaps. In reality, it seems like a thorough discussion of that would lead to a group recommendation that is more likely to have a long-term benefit than any of the existing proposals.

I would propose we ditch the grading system altogether, and get the MSWG as whole to continue our discussions, try to eliminate clearly controversial proposals, and come up with some data-based recommendations on what technologies would best move the issue in a positive direction.

**Comments from Mary Byrd (SBAPCD) to MSWG**

**Sent via email August 7, 2015**

Here are some of our assumptions.

-Planned VSR works the best for reducing air emissions because it provides the best opportunity for months of advanced planned - so reduced speed can potentially be incorporated into the schedule, rather than rely on speed up.

-Dynamic management is challenging for AQ in that without the advanced planning opportunity, speed up is virtually guaranteed.

-While routes outside the Channel move air emissions further offshore our County, these emissions will affect areas to the south of us, due to the wind patterns.

**Comments from John Calambokidis (Cascadia Research) to MSWG  
Sent via email August 7, 2015**

Since everyone else is sharing here is mine as well. Since I could not attend the last meeting and so I have taken some liberty to make some adjustments to a couple of these proposals in particular I have added a small qualification to Option 2 (and which could equally be applied to option 4) that I think would make it a better option and graded it accordingly (see below). I share some of this since unfortunately the next meeting will also occur during a period I could not attend (due to a project I am doing with the Navy).

I was asked to sit in on a meeting with Dep Asst Sect of Navy week before last at the Pentagon discussing the Navy role in ship strikes. I asserted my own personal opinion that the Navy could significantly improve outcomes for reducing ship strikes by at least entertaining and evaluating what possible routes S of the islands might both benefit whales but also be designed specifically with Navy input to reduce conflicts with Navy activities. Since ships currently use the southern route in a much less controlled and predictable manner with no consideration of interference with the Navy, I believe such an arrangement could achieve all objectives of reducing threat to whales, reducing air pollution close to shore, give shippers more options under more defined and therefore greater safety, and with neutral negative impact on Navy (could result in more ships using S route but they would be on a more defined predictable route designed with the Navy's input). If the Navy would agree to this (and their seemed a good deal of appreciation for this being a reasonable suggestion they will evaluate), it would hopefully free up our group to design the best way to achieve this.

My final point is that while SeaSketch is a good tool for roughing out ideas, I do think we need a more rigorous analysis as we narrow down options for identifying details and impacts on routes, especially as it related to benefit to whales. I think all of us involved in whale research would strongly disagree with the statements that because whales are everywhere, no route has benefits. All data and science has indicated whales are not homogenously distributed and are highly clumped and while there are seasonal and annual differences they do not mean there are not longer term underlying patterns that will result in significant differences in ship strike impacts.

**Comments from Captain Kip Louttit (Marine Exchange of Southern California) to MSWG  
Sent via email August 10, 2015**

1. With respect to the goal to: "Improve navigational safety and promote efficient maritime shipping throughout the region," I don't see any value in of any of the proposals to create lanes South of the Channel Islands (what mariners call the West) that would accomplish this goal. The data doesn't support creating additional lanes or making the current Western Lanes mandatory:
  - a. We have had zero collisions, allisions, groundings, incidents, or close calls/near misses in those waters.
  - b. The waters are very open and the traffic is very spaced out. Please see the attached picture, which has only 2 ships in those waters (Dubai Glamour and Luminous Ace) that would be subject to traffic lanes, and they are 9 miles apart. They are doing to different ports...one to El Segundo and the other to LA... if the goal is efficiency, let the ships choose their routes in open waters... each ship knows what's most efficient for that ship...it's how they are safe and economical. Per IMO, traffic lanes are to be created where waters are confined and congested...not true here.
    - i. As an aside, one ship is going 12.5 knots and the other 9.7 knots, so their behavior is also naturally consistent with both accomplishing the air quality and reducing speed for whales goals.
  - c. Traffic to/from the West is down since the ECA change 1 January. Between 61 and 84 ships approached through these waters in 2015, and between 55 and 93 ships departed through these waters per month... that's 2-3 ships a day. Please see the attached chart,

which shows a drop of 30-40 ships per month in each direction compared to 2014. We lucked out... the ECA change helped reduce the traffic in these waters.

2. Analysis: The volume of ships and wide open waters do not support the need for traffic lanes in these waters.
3. Conclusions:
  - a. I non-concur with creating any more lanes in these waters.
  - b. I non-concur with the notion of making the Western Lanes Mandatory...they work just fine as they are and give the ships going to/from El Segundo better/safer routing options than if the lanes were mandatory.