Four options for lead fishing tackle use at 13 lakes identified as common loon breeding territories were developed and ranked by participating Advisory Group members on August 3, 2010. Advisory Group members agreed that each member would rate each option from 0 to 3, with 0 being least preferred and 3 being most preferred. Each rating number was used only once, such that a most preferred option and a least preferred option was identified by each.

<table>
<thead>
<tr>
<th>Options</th>
<th>Advisory Group Member (Initials)</th>
<th>Summary</th>
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<tr>
<td>1) Status Quo: Fishing regulations on the 13</td>
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<td>lakes under discussion would remain as they are, i.e., no lead fishing tackle restrictions.</td>
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<td>2) Total Lead Fishing Tackle Ban: A total restriction on all lead fishing tackle on each of the 13 lakes identified.</td>
<td>3</td>
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<td>3) Partial Lead Fishing Tackle Ban: No lead fishing weights or jig heads on each of the 13 lakes identified.</td>
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<td>4) Partial Lead Fishing Tackle Ban: No lead fishing weights or jig heads equal to or less than 1 ounce or equal to or less than 1 1/2” along the longest axis.</td>
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August 31, 2010

Lead Fishing Tackle / Common Loon Advisory Group Evaluation of Options
developed from August 3, 2010 Meeting in Moses Lake

Summary prepared by WDFW Fish Program support staff – John Whalen, Spokane Regional Office

Options 1 through 4 are presented below with comments on Pros and Cons received from Advisory Group members. Advisory Group Member responses have been combined and grouped by Option 1 through 4 under applicable Pro or Con category.

1) Status Quo:
Fishing regulations on the 13 lakes under discussion would remain as they are, i.e., no lead fishing tackle restrictions.

Pros: Reasons for supporting this approach
- Least disruptive for enforcement
- Does not increase the complexity of regulations
- Does not impose an additional financial and regulatory burden on the fishing public.
- Consistent with the lack of definitive data on the contributory effect of common loon mortality from lead fishing tackle within these 13 lakes on the overall population status and productivity rates of the common loon throughout its range
- Consistent with data presented that indicates loon productivity is above replacement (but certainly not robust) on the 13 lakes in question
- Provides for an opportunity to decrease uncertainty about the impacts of the regulation by waiting to assess the response to changing regulations in states already implementing and refining lead restrictions
- Does not fuel the perception that an effort is underway to ban lead fishing tackle throughout the state
- There is not a sufficient impact on loon populations from lead ingestion to merit restrictions at this time. On balance maintaining rec fishing opportunity is important to WA.
- Maintain recreational opportunity and angling success.
Data and good science should drive WDFW decisions.
Data and sound science should drive WDFW decisions relative to all rule making.
The Agency and Director are looking for this advisory committee to provide a road map outlining how they might deal with future issues related to lead use in fishing tackle. Given the polarization of the group and the passion all anglers have relative to fishing, and that this issue is not going away anytime soon; a formal decision making process needs to be developed that will help guide the agency when faced with ruling on such highly charged issues. While a citizens advisory group has its purpose, additional process elements that seek to eliminate personal agendas and opinions not based on data are needed in order to close the loop in the decision making process. (A decision making tree).

Cons: Reasons against supporting this approach
- Science demonstrates a link between common loon mortality and lead sinkers. Status quo is not responsible wildlife management.
- This will not protect loons from lead toxicosis and mortalities will continue to affect the common loon population. On breeding lakes that are heavily fished, loons face a death sentence every day while rearing young.
- Wildlife, fish, and shellfish are the property of the state. The commission, director, and the department shall preserve, protect, perpetuate, and manage the wildlife and food fish, game fish, and shellfish in state waters and offshore waters. One lead sinker can kill a loon. Loons ingest lead when they eat fish that are still attached to the fishing tackle. The breeding populations are the key to the preservation of the population in Washington. We need to protect these loons from lead.
- does not respond to scientific evidence that at least some forms of lead fishing tackle are contributing to mortalities of common loons on 13 loon nesting lakes in Washington State
- does not meet the legislative mandate to preserve and protect a state sensitive resource given that a known mortality factor is evident and the agency has the appropriate regulatory authority to address the issue
- does not address the numerous other sources of mortality to nesting loons on the 13 target lakes
- Numerous scientific studies have proven the toxicity of ingested lead, research has found that the common loon will ingest lead tackle from both lake bottoms and off of active fishing lines resulting in lead poisoning. Taking no action to reduce the amount of lead introduced to known common loon habitat will result in the continued ingestion of lead tackle by loons and continued mortality by lead toxicity.
- Lead tackle has been demonstrated to poison common loons and other wildlife in Washington. Non-toxic alternatives are available; it is not necessary to use lead fishing tackle. Programs encouraging voluntary use of non-lead tackle have been shown not to be effective; regulation appears to be the only effective way to significantly reduce the amount of lead being released into aquatic environments. This position is typically supported only by those who stand to be inconvenienced or impacted financially by the regulation of lead tackle, and it is in inconsistent with the vast amount of scientific
documentation showing that lead harms wildlife and people.

2) **Total Lead Fishing Tackle Ban:**

*A total restriction on all lead fishing tackle on each of the 13 lakes identified.*

**Pros: Reasons for supporting this approach**

- Easily understood and Enforced
- This action provides the best protection for the breeding populations of common loons on nesting/breeding lakes. This allows for maximum number of chicks to hatch and survive to return to the natal lake regions for building the WA common loon population.
- Wildlife, fish, and shellfish are the property of the state. The commission, director, and the department shall preserve, protect, perpetuate, and manage the wildlife and food fish, game fish, and shellfish in state waters and offshore waters. One lead sinker can kill a loon. Loons ingest lead when they eat fish that are still attached to the fishing tackle. The breeding populations are the key to the preservation of the population in Washington. We need to protect these loons from lead.
- Provides the highest degree of protection to loon breeding population within the 13 lakes identified
- maximizes the probability that mortality from lead fishing gear will not continue as a critical factor in loon productivity
- enhances the general social initiative to reduce lead in the environment
- consistent with DOE initiative on lead reduction
- A total lead ban would make enforcement and compliance easier when it comes to sinkers and jigs. Total lead ban would eliminate need to weigh or measure each item of tackle. Total lead ban would eliminate the introduction of all lead to the 13 identified lakes and drastically reduce the opportunity for common loon ingestion of lead tackle.
- This approach is the most straightforward and least confusing for both anglers and enforcement officers. Of the three options to regulate lead tackle herein, this option will do the most to reduce the amount of lead being released in and near the lakes. This benefits not only loons, but any other people and wildlife using the lakes.
- Eliminates lead as a possible limiting factor.

**Cons: Reasons against supporting this approach**

- Science presented did not support a complete ban. Evidence presented, for example, did not link common loon death to lead core line.
- far exceeds the scientific evidence provided to the panel in that limited mortality data were presented for factors other than small lead fishing tackle (many fishing-related mortality factors were addressed anecdotally but without discrete mortality data)
- maximizes the impact of the regulation on tackle manufacturers and fishers
- enforcement would be a challenge in that the materials in some fishing related gear is not clearly evident
- there is no clear or concise statement of the implications of this regulation in that most panel members were not aware of what materials various fishing gear is made of
• enforcement might be challenged to determine what material any particular lure or tackle component is made of
• although this alternative might be preferred by enforcement, it might not be as straightforward as anticipated given the comment above. In addition, convenience of enforcement should not be a compelling factor in determining the efficacy of a regulation
• does not address the numerous other sources of mortality to nesting loons on the 13 target lakes
• Lead is a material used in many types of tackle beyond weights and jig heads, depending on origin of said tackle anglers may not know that their tackle contains lead and enforcers will likely have even more trouble identifying which tackle contains lead.
• There is insufficient science to merit this. A total ban eliminates possibilities of technological advances of products that may contain lead. This approach does not balance resource impacts with recreational, social and economic impacts.
• Not supported by WDFW data. Viewed by Public as start of expanded future lead restrictions. Reduces angler success, hence teaching stewardship.
• Not currently supported by sound data that applies to the 13 lakes in questions. While data exists that clearly demonstrates that lead is harmful, the group was not presented with test results that clearly showed that the two loons that died at a location near or on one of the 13 lakes in question, in fact died of lead poisoning. The Agency is currently looking for the official reports that could outline the cause of death but has not yet found them.
• Further, the process used to propose the option of a total lead ban is inadequate relative to dealing with such a highly charged issue. The “lead ban” scenario is not going away. While citizen advisory groups and public opinion have purpose, they should be part of a larger decision making process that include additional criteria that will help facilitate the decision making efforts.

3) Partial Lead Fishing Tackle Ban:
No lead fishing weights or jig heads on each of the 13 lakes identified.

Pros: Reasons for supporting this approach

• Science demonstrates a link between common loon mortality and lead sinkers. Status quo is not responsible wildlife management.
• Alternative fishing lakes exist for those that still want to use lead gear. Also, alternative fishing gear exists for those that still want to fish at these locations.
• This is the second-best action that would provide protection for the common loon on its breeding lakes. See above reasons as they apply here too.
• Wildlife, fish, and shellfish are the property of the state. The commission, director, and the department shall preserve, protect, perpetuate, and manage the wildlife and food fish, game fish, and shellfish in state waters and offshore waters. One lead sinker can kill a loon. Loons ingest lead when they eat fish that are still attached to the fishing tackle. The breeding populations are the key to the preservation of the population in Washington. We need to protect these loons from lead.
• fulfills or exceeds the WDFW stewardship responsibility and mandate to preserve and protect
• similar to but extends beyond packages already in place in other states and for which response data were presented
• could possibly exceed the protection level offered by Option 4 (85% improvement from prior mortality rate)
• Total ban on weights and jig heads would make compliance and enforcement much easier, with no need to measure, weigh, or argue loopholes. Total ban of weights and jig heads on the 13 identified lakes would drastically reduce the amount of lead tackle introduced, and address directly the types of lead tackle typically consumed by the common loon. Enacting this ban would limit the common loon’s lead tackle exposure and potential for ingestion and mortality by lead toxicity.
• Not as comprehensive as Option 2, but still would go a long way to limit the amount lead being released at these lakes.
• Less restrictive so allows some lead lures; easier to enforce

Cons: Reasons against supporting this approach

• does not provide the maximum possible protection from toxicity and mortality from lead fishing equipment to nesting loons
• increases the complexity of the regulations for fishers
• increases the enforcement complexity
• exceeds the regulatory need if the productivity of loon populations is viewed from the global perspective
• contributes to the concern that lead bans will be extended throughout the state
• beyond the scope of regulations adopted by other states. Expert testimony (John Cooley – New Hampshire data) chose not to provide a recommendation for size restrictions or the expected impact of restrictions beyond those already in place
• does not address the numerous other sources of mortality to nesting loons on the 13 target lakes
• There is not a sufficient impact on loons from lead weights or jig heads to merit this approach. This approach does not balance resource impacts with recreational, social and economic impacts.
• Might be more difficult to enforce than Option 2.
• Limits opportunity and success.

4) Partial Lead Fishing Tackle Ban:
No lead fishing weights or jig heads equal to or less than 1 ounce or equal to or less than 1 1/2” along the longest axis.

Pros: Reasons for supporting this approach

• Reasonable approach to protect the common loon – backed by science.
• Alternative fishing lakes exist for those that still want to use lead gear. Also, alternative fishing gear exists for those that still want to fish at these locations.

• Again, this would work (80%) but lead toxicosis likely would persist. This ban would protect against some lead fishing tackle--but not all! The size of jigs needs to be larger, such as 2”.

• Wildlife, fish, and shellfish are the property of the state. The commission, director, and the department shall preserve, protect, perpetuate, and manage the wildlife and food fish, game fish, and shellfish in state waters and offshore waters. One lead sinker can kill a loon. Loons ingest lead when they eat fish that are still attached to the fishing tackle. The breeding populations are the key to the preservation of the population in Washington. We need to protect these loons from lead.

• fulfills the WDFW stewardship responsibility and mandate to preserve and protect

• consistent with packages already in place in other states and for which response data were presented

• according to testimony provided (John Cooley-New Hampshire) a similar package reduced the lead-related loon mortality by about 85%

• the current data for 13 Washington nesting lakes indicates two loons lost to lead poisoning over 15 years data. Reducing lead mortality by 85% would suggest that virtually no mortality would be detected over long periods of time (2 X .85 = 1.7 of two loons protected)

• preventing 85% of current mortality from lead fishing gear would seem to increase productivity above the .48 rate identified by WDFW Wildlife personnel (Derek). Productivity is just borderline under current conditions.

• this package probably does not extend beyond the data and information presented to the panel

• costs for fishers to comply with this regulation are not onerous on a per-piece basis. For example, even if tungsten was substituted for a 3/8 oz lead worm weight, the per-unit or absolute cost would be about $1.25.

• A partial ban would result in limited introduction of lead to the 13 identified lakes. This would also reduce the opportunity of ingesting certain sizes and types of lead tackle by the common loon.

• Still less comprehensive than Option 3, but would likely help to limit some sizes of lead available to loons.

• Less restrictive than options 2 and 3.

**Cons: Reasons against supporting this approach**

• Difficult to understand – 1 oz. I have a lot of loose split shot in my box and could not tell you if it was or was not less than 1 oz.

• Wildlife, fish, and shellfish are the property of the state. The commission, director, and the department shall preserve, protect, perpetuate, and manage the wildlife and food fish, game fish, and shellfish in state waters and offshore waters. One lead sinker can kill a loon. Loons ingest lead when they eat fish that are still attached to the fishing tackle. The breeding populations are the key to the preservation of the population in Washington. We need to protect these loons from lead.
• This is very difficult to enforce.
• does not provide the maximum possible protection from toxicity and mortality from lead fishing equipment to nesting loons
• increases the complexity of the regulations for fishers
• increases the cost for substitute materials
• increases the enforcement complexity
• exceeds the regulatory need if the productivity of loon populations is viewed from the global perspective
• contributes to the concern that lead bans will be extended throughout the state
• might actually exceed the response merited by the data presented for Washington state
• detection of the impact of this (or other restrictive) regulation change will be nearly impossible given the sample sizes
• does not address the numerous other sources of mortality to nesting loons on the 13 target lakes
• Enforcement and compliance though doable could potentially be complicated by the need to weigh or measure each piece of tackle. Current studies have found that loons have been identified with lead toxicosis from the ingestion of lead tackle outside of the stated size and weight restrictions.
• There is not a sufficient impact on loons from lead weights or jig heads to merit this approach. This approach does not balance resource impacts with recreational and economic impacts.
• Probably more difficult to enforce because items would have to be measured. Loons may be able to ingest items over 1-1/2” long.
• May create angler confusion and enforcement challenges.