I. INTRODUCTION
A. Fish & Wildlife Program Direction

1. The Council’s 2014 Fish and Wildlife Program provides following direction on dealing with wildlife operational losses:
   
   (a) Mitigation agreements should be considered to settle operational losses in lieu of precise assessments of impacts.

   (b) The need for new methods to assess operational losses that incorporate the results of ongoing pilot projects. This could include technical testing and evaluation of operational loss models and methodologies, or other alternative habitat evaluation methods.

The following describes several approaches for addressing the impacts of hydro systems operations on wildlife populations.

II. TECHNICAL APPROACH
A. Issues

1. Timing

2. Transferability
   
   a) Flathead Test Results
      
      (a) 1 year bird data

3. Ability to use in other hydrologic systems

4. Other systems with bird data/hydrological data
   
   a) ID potential projects

5. Can we use CHAP approach or combined with Kootenai Pilot??
   
   a) Side by side comparison with IBI

6. How do you translate to mitigation?
   
   a) Currently working on how to do it

7. Land ownership issues

8. Relationship to fish mitigation

9. Offsite mitigation

10. Look at the entire system?
    
    a) RFP to characterize the hydrosystem
B. Pros

1. This approach would provide a technical and scientific basis assessing wildlife operational losses. It could follow several different paths, from carrying out detailed assessments at the subbasin level, modeled on the Kootenai River Project or focus on developing a more landscape level basinwide approach.

2. These types of assessments would provide a quantitative basis for hydrosystem responsibility for wildlife operational losses.

3. This approach is also consistent with the 2014 Fish and Wildlife Program that calls on: The need for new methods to assess operational losses that incorporate the results of ongoing pilot projects that have explored how best to fulfill that specific need. This could include technical testing and evaluation of operational loss models and methodologies, or other alternative habitat evaluation methods.

Cons

4. This approach will require both technical support and funding to develop the technical tools required to meet either the subbasin or regional approach. There are likely to be substantial costs in addressing the issues tied to this approach

5. Development of the necessary technical tools and funding for implementation could take a number of years and carrying out the technical studies will add a number of years to that timeframe further delaying and increasing mitigation necessary for hydro related wildlife operational losses.

III. AGREEMENTS

A. Issues

1. Timing
2. Financial Availability
3. Relationship to fish mitigation
4. Flexibility
5. Lack of Assessment

B. Pros

1. Under this approach, Bonneville and the regions fish and wildlife agencies and tribes would negotiate agreements to provide mitigation for the remaining wildlife losses, including wildlife operational losses. These agreements would similar to agreements currently in the Willamette Basin and Southern Idaho.

2. Agreements are often less costly than other approaches in that they require a lesser amount of technical assessment but rely on the expertise of the fish and wildlife managers.

3. Agreements can provide greater management and implementation flexibility for wildlife managers as well as assured funding under terms of the agreement.
4. This approach is also consistent with the Council’s 2014 Fish and Wildlife Program: Mitigation agreements should be considered to settle operational losses in lieu of precise assessments of impacts.

C. Cons
1. Lack of formal assessment of the operational impacts means that the losses are not formally quantified but are based on the estimates from wildlife managers. Some managers have expressed concern over negotiating agreements without some estimate of impact of the hydro operation to wildlife.

2. Financing multiple agreements in a timely manner could be difficult to include in the Bonneville Fish and Wildlife Program budget. This has the potential to delay mitigation in some areas.

IV. COMBINATION
A. Issues
1. Timing
2. Financial Availability
3. Relationship to fish mitigation
4. Flexibility
5. Look at the entire system?
   a) RFP to characterize the hydrosystem

6. How do you translate to mitigation?

B. Pros
1. This approach would combine agreements with a modified technical approach to provide a landscape level characterization of the operational impacts of the hydro system which could then provide the basis for negotiating the operational portion of wildlife agreements.

2. This approach would appear to be consistent with the Council’s 2014 Fish and Wildlife Program which stresses the use of agreements while at the same time recognizing the need for new methods for assessing wildlife operational losses as described in the Introduction.

C. Cons
1. This approach will require both technical support and funding to develop the high level, basin-wide assessment process required to meet either the regional approach. There are likely to be substantial costs in addressing the issues tied to this approach but likely would be less than required by technical approach.
V. OTHER?
A. Pros
1. (Reason)
2. (Reason)
3. (Reason)
B. Cons
1. (Reason)
2. (Reason)
3. (Reason)

VI. DECISION