Desired Outcomes

At the August NFHAP Board meeting, the Board asked for estimates of the economic impact and value of the direct habitat investments. These are additive to the estimates provided previously. It is hoped that the Board could endorse the entire analytical approach as an advocacy tool and as an input into developing an advocacy statement.

Background

Economic impact models compile national business and consumer transaction data and translate changes in sector spending into direct, indirect, and induced effects within a user defined regional economy. Direct effects are the changes accruing to the industries directly impacted by the change in economic activity. Indirect effects are the effects accruing to industries that support the directly affected industry by supplying capital, material, and labor inputs to the directly affected industries production process. Finally, induced effects are those effects generated by the labor sector spending income they earn from the directly and indirectly affected industries in the local region.[1]

This analysis includes the sum of the direct, indirect, and induced effects. The sum of these effects can be expressed in terms of total sales, income, and employment impacts. Total sales are a measure of the total economic activity generated by both administration of NFHAP grants and the actual construction those grants support. Employment impacts detail the total number of jobs supported by economic activity in the region. Income impacts represent the wages, salaries, bonuses and business profits generated by the same economic activity. Often, income impacts are also used as a proxy for direct estimates of net value or profits.[2]

The estimates presented in Table 1 were generated by applying IMPLAN multipliers to the direct investments by year as provided by Tom Busian. Tom suggested that 30% of these investments were for administrative purposes and 70% were invested in actual restoration activities. While this may not adequately reflect any particular partnership's spending, without any data, it is impossible to refine this split.

US level multipliers were used because we are looking at the national impact of state expenditures. US level multipliers are higher than state level multipliers because multipliers are based on economic activity within a study region. At the state level, more materials have to be imported so the state level multipliers are naturally lower.

Administrative expenditures were applied to sector 492 – "Grant making, giving and social advocacy." Construction expenditures were applied to sector 41 – "Other construction." Each sector generates expenditures on all activities that might be generated with conducting other construction, for example, based on national averages. This would inlcude labor and materials. It would be more satisfactory to collect data from partners regarding actual expenditures on each individual good, however that is unneccessary for overally accuracy. It would increase accuracy if data on actual goods purchased was collected for a couple of representative projects and used to better apportion expenditures. Table 2 contains the total estimates after combining them with the previous esitmates.

The estimates in Table 2 from the first presentation are lower than the estimates presented previously. There was an outlier in the 2008 data and it has been dropped. There was a lake in Louisiana that received a small grant for invasive

[1] Minnesota IMPLAN Group, Inc. 1997. IMPLAN Professional: social accounting and impact analysis software. Minneapolis, MN

[2] Edwards, S.F. 1990. An Economics Guide to Allocation of Fish Stocks between Commercial and Recreational Fisheries. NOAA Technical Report NMFS 94. November.

aquatic vegetation control in 2008 that was driving the high estimate. In the reporting, the grantee claimed credit for restoration of the entire lake, which was quite large. While their efforts may have restored the lake, it was removed from the estimates. This had the effect of reducing benefits by over $190 million and jobs by over 4,000 in total. Overall, I think the esitmates are very favorable and will prove quite useful. These estimates would likely be much higher if we had better data on investements and restoration outcomes.

Proposal for the NFHAP Board

1. **Approve these estimates for use in advocacy (now).**
2. **Work towards developing a stronger methodology to both evaluate projects and develop advocacy values (long term).**
3. **Work towards collecting and including economic data into the assessment database**

Estimates

Table 1. Economic Impact of NFHAP Investments Since 2006.

Year	Output	Income	Jobs
2006	$7.2	$3.3	55
2007	$14.8	$6.7	113
2008	$20.3	$9.2	154
2009	$18.7	$8.5	142
2010	$0.0	$0.0	0
2011	$0.0	$0.0	0
Total	**$61.0**	**$27.6**	**464**

In millions of 2010 dollars, except jobs.

Table 2. Economic Value and Jobs Supported by NFHAP Activities by Habitat Type.

Year	Value Before	Jobs Before	Value Now	Jobs Now
2006	$67.1	1,517	$74.3	1,572
2007	$90.0	2,035	$104.8	2,148
2008	$148.1	3,349	$168.3	3,503
2009	$105.2	2,380	$124.0	2,522
2010	$0.0	0	$0.0	0
2011	$0.0	0	$0.0	0
Total	**$410.4**	**9,281**	**$471.4**	**9,745**