

### **1. Report Writing and Timing**

It was difficult to complete two consecutive years of fish monitoring reports at the same time. Due to funding and staff capacity, the writing of the 2011 and 2012 Fish Monitoring Reports happened concurrently. The initial draft reports were submitted to TNC within a week of one another. Since the reports are similar in structure and intent much of TNC's comments were repeated in both documents, thus drawing out and making the review process longer. Conversely if the 2011 Fish Report was completed and finalized before the first draft of the 2012 Fish Report efficiencies could be made and it would have eliminated redundant comments and reduced review time. Ideally the 2011 Fish Report would have been completed immediately after the field season but funding for a report was not secured at the time. In hind sight, by allowing more time to complete 2011 report before embarking on the 2012 it would have probably saved time and resources.

### **2. Report Structure and Design**

As more data is analyzed and the project has progressed it may be necessary take a step back and redesign the structure of the report so that it presents multiple years of data in a useful format and to make sure the format is well suited to present results related to project and learning objectives. This is true for the Fish Reports at Fisher Slough as well as the overall Annual Monitoring Report structure.

Since 2009, the Fisher Slough Fish Reports have followed the same general format and outline. While multiple years of data are included in each of the subsequent fish reports the original format does not lend itself to providing results on multiple year comparisons. The Fisher Slough project is fortunate in that there are multiple years of fish data to include and it is reasonable to expect the format and the presentation of the data to change as more information is available.

TNC put a lot of thought into the design of the Baseline Monitoring Report, the first overall annual report, to make sure that it could be used as a template for subsequent annual reports. While we tried to predict the questions and parameters that would provide the most meaningful answers, in some instances after we analyzed the data it became clear what was useful and what wasn't to report. After we received and input real data it became apparent that it would make sense to eliminate, combine, or re-evaluate some of the parameters included in the report. Since we now have post project data it would be helpful to re-evaluate which parameters are the most useful and will provide the most relevant information to be able to assess the project objectives. As an example, there are multiple parameters that compare tidal amplitude upstream versus downstream of the floodgates as a way to evaluate if tidal amplitude increased upstream as a result of the new floodgate installation (see Hypothesis 1). There are slight differences in what each of the parameters measures that are used to evaluate Hypothesis

1; however one can easily get distracted from the detail included in these parameters and lose sight of the main question. In this example, condensing or reducing the number of parameters included to evaluate Hypothesis 1 would help clarify and simplify the results as they relate to the question.

In short, after a few of years of collecting monitoring data and reporting it is necessary to include time and resources to re-think the way future data is presented so that it is easily accessible to the reader and progress made toward project objectives are clearly identified.

### **3. Unforeseen Equipment Repairs and Technology**

Build in a budget for technology upgrades. The floodgate monitoring equipment is like all other technology – it becomes outdated and obsolete in a few years. The floodgate monitoring equipment at Fisher Slough was installed in 2009 and at the time, the best that could be afforded. Since its installation, two of the three floodgate door monitoring devices have malfunctioned. The cause of the damage is simply due to normal wear and tear that is seen in this type of system. We asked the manufacture for a cost estimate to make the necessary repairs to the monitoring equipment. The estimate to make the repairs to the old system is about half as much as it would cost to replace the monitoring system with new and improved technology. The manufacturer is reluctant to make repairs to an outdated system that is vulnerable to future problems when there is better more advanced technology available.