#### Progress to Date

## Project: 070806/Are Herring Energetics in PWS a Limiting Factor?

Summary: This project was approved in late fall of 2006, precluding initial sampling planned for the fall. However, an early winter collection period was accomplished and the study is otherwise generally on track to meet the projected deadlines.

Outlined below are the first year objectives. Specific progress towards these goals is itemized in following remarks.

## Objective 1. Measure caloric content and proximate composition in YOY and age-1 herring in the fall and the subsequent spring. Field measurements to be met by May 2007; Chemical analysis to be met by July 2007.

Juvenile herring were collected from all 3 study sites during early winter and spring sampling periods. Exact ages of specimens are unknown until scales have been aged. Bioelectrical impedance analysis was performed at the time of capture. We are in the processes of finishing laboratory dissections and measurements of herring and have commenced the chemical analysis of proximate composition and energy content of voucher specimens.

## Objective 2. Measure caloric content and proximate composition in adult herring in the fall and in the subsequent spring, before and after the spawning event. Gonads will be separated and measured separate from the rest of the carcass. Field measurements to be met by May 2007; Chemical analysis to be met by July 2007.

Adult herring were collected from all 3 study sites during early winter and spring sampling periods. Bioelectrical impedance analysis was performed at the time of capture. We are in the processes of finishing laboratory dissections and measurements of herring and have commenced the chemical analysis of proximate composition and energy content of voucher specimens.

# Objective 3. Compare the measurements from 3 regions and interpret the regional differences and similarities with implications for management. Statistical analysis and interpretation to be met by September 2007.

Upon completion of the chemical analysis of the voucher specimens, we will convert bio-electrical impedance measurements to proximate composition and energy values based on our herring model. Statistical analysis and interpretation will follow.