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DNR: Manchester Fish Hatchery

## Part I: Overview of Business

- DNR: Manchester Fish Hatchery
- The first fish were produced here in the 1890's.
- Operated by the U. S. Fish and Wildlife Service until 1976 when it was given to the state of Iowa via a land trade.
- Since 1976, it has functioned as Iowa's trout brood stock station where trout are spawned, incubated and hatched annually to produce over 600,000 fish for stocking in Iowa waters.

## Part II: Job Specifics

- Creel Survey
- Fisheries agencies seek more and better information to cope with the growing demands for finite recreational resources.
- Importance of creel surveys spans social, economic, and political factors, as well as the traditional biological concerns in fisheries management.
- Use data to regulate harvests, to stock fish, and to enhance habitats.

## Part III: Introduce the Problem

- Organize data from creel survey in a spreadsheet
- Analyze data for trends
- Recognize what information is important to the management personnel of the fishery.

## Part IV: Background

- What content knowledge does student need to solve the problem?
- Need to comprehend spreadsheet creation.
  - Need to know basics of using spreadsheet to store and sort data, to make graphs, and to make forecasts.

## Part V: Business Solution

- Business would solve this problem by entering data into a spreadsheet and statistically analyzing the entered data.

## Part VI: Student Solutions

- Conduct more creel surveys
- Organize data by other topics
- Make hypotheses based on analysis of collected data