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Memo To: Howard Steeley and Vern Meinz

From: Pat Lee

Subject: East Point Seafoods Study by Smith

Date: January 7, 1975

I have examined the East Point Seafoods Water Quality Study by John Smith in detail and have formed the following observations about it.

1. The dissolved oxygen data, which is the main thrust of Smith's work, generally agrees with our survey of August 20th and 21st. That is, the D. O. levels he reports pretty well match up with our concentrations. I don't want to go into a lengthy comparison of data, but I think it is sufficient to say that where stations coincide, no serious anomalies of data appear. A map is included to show where the stations coincide.

2. Smith states that "there is sufficient water delivered to the Willapa River in the vicinity of East Point Plant, by tide and river to flush oxygen demanding wastes out of the area" (page 8 in conclusions). He doesn't support this statement with any facts such as dye study data. I feel that both his D.O. data and our D.O. data show that the opposite is true. If there were excellent flushing action, then there wouldn't be 50% to 60% saturation values in the river.

3. Smith states on page 4 that "it is not logical to propose that the East Point Plant is responsible for low D.O.'s at station A3." He says this because of data between A3 and East Point showing higher D.O. levels than at A3. I would tend to doubt the validity of this statement because of the complexity of this estuarine situation. Every time there is this sloshing back and forth action typical of estuarine areas, it is very difficult to analyze the situation using the normal above-below methods. The Grays Harbor College report does acknowledge a small D.O. drop near East Point but does not consider it significant. We found essentially the same sag, but we also sampled the point sources in the river. Using this approach, it becomes apparent that East Point's BOD loading is an order of magnitude greater than the rest combined. This is the main factor that makes me think that East Point is responsible for the low D.O.'s. Our stations were also stretched out over a much longer river reach than Grays Harbor College's, thus making the sag more apparent.

In summary I would like to say that essentially both our report and John Smith's Grays Harbor College report show the same data. We just interpreted it differentl This is pretty typical in most complex reports of this type.

PL:eme
Attachment

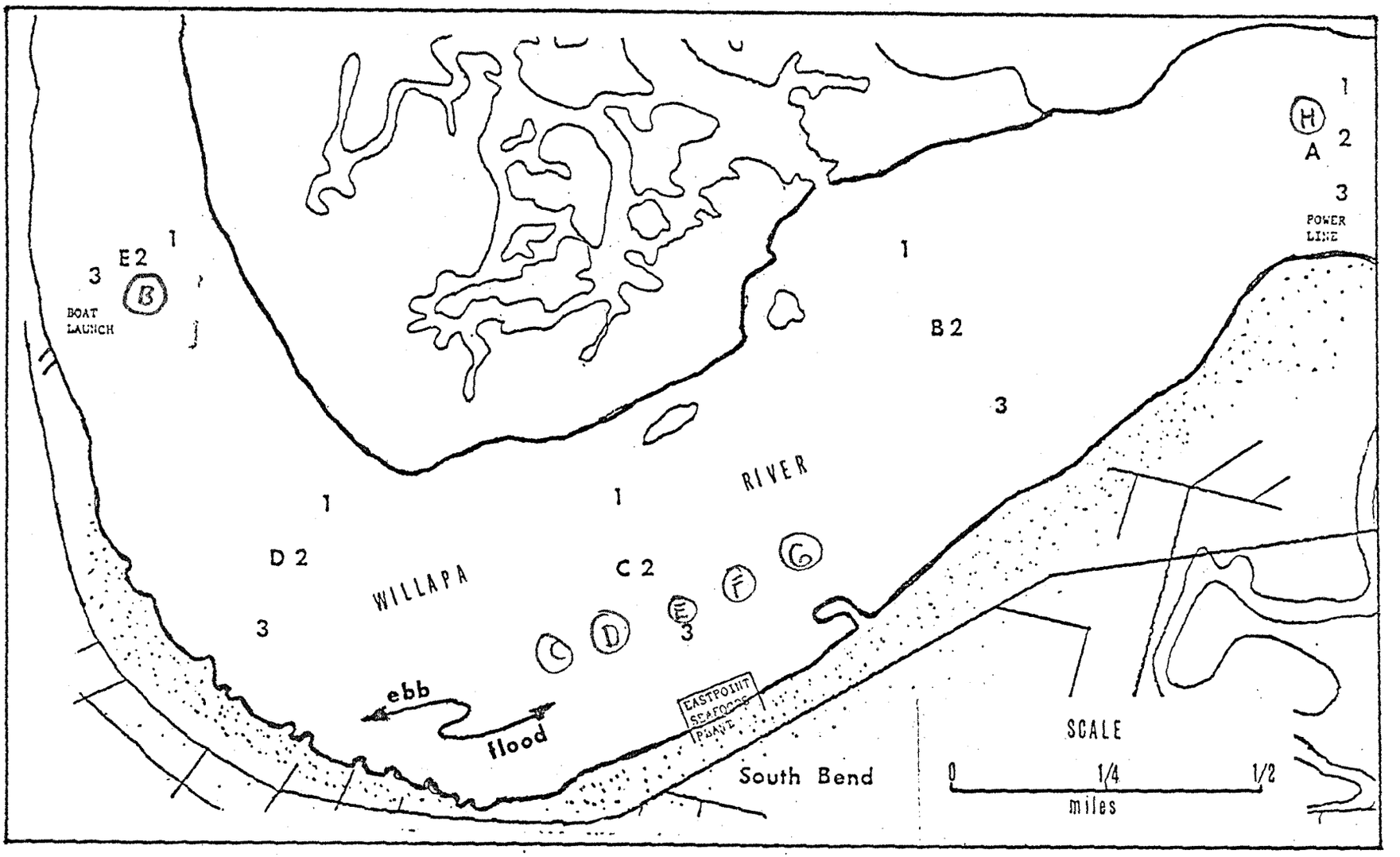

Figure 1. A map of the Willapa River in the vicinity of the East Point Seafood Plant South Bend, Washington. Circled letters are DOE stations, while the others are GHC stations.