Concept Monitoring Plan

StarKist NPDES Permit AS0000019 Renewal

Main Points:

1) Accumulated water quality data indicates degraded conditions when waste load significantly beyond 2008 permitted effluent limitations.

2) StarKist requests effluent limitations for nitrogen above 2008 limits. All other parameters essentially in compliance today, and are achievable at 2008 limits.

3) "Uncertainty" is acknowledged with regard to acceptable effluent limits in order to maintain acceptable water quality.

4) Monitoring of receiving water (Pago Pago Harbor) best way to assess impacts of selected effluent limitations.

5) Present day monitoring program for Pago Pago Harbor does not provide adequate characterization of extent of waste plume impact. Today, enhanced monitoring program is recommended to characterize conditions.

6) If effluent limits are to be less stringent than 2008 limits, monitoring program must be enhanced.

7) Enhanced monitoring program proposed for 30 months (half of 5-year permit period).

8) Monitoring frequency increased to 3x annually.

9) Results evaluated end of 3rd year of permit period.

10) Enhanced monitoring program to include:
(a) transects through impacted region (3 for best coverage)
(b) existing station at diffuser (14)
(c) existing stations in vicinity of diffuser (8 & 8A)
(d) new stations mid-way between diffuser and edge of mixing zone (also existing sta 15)
(e) new stations at edge of mixing zone (also existing sta 16)
(f) at least 1 new station beyond edge of mixing zone along each transect
g) vertical profiles for dissolved oxygen at all stations
h) samples at 5 depths, all stations, for total nitrogen, total phosphorus, total suspended solids.
11) Concept sketch below.

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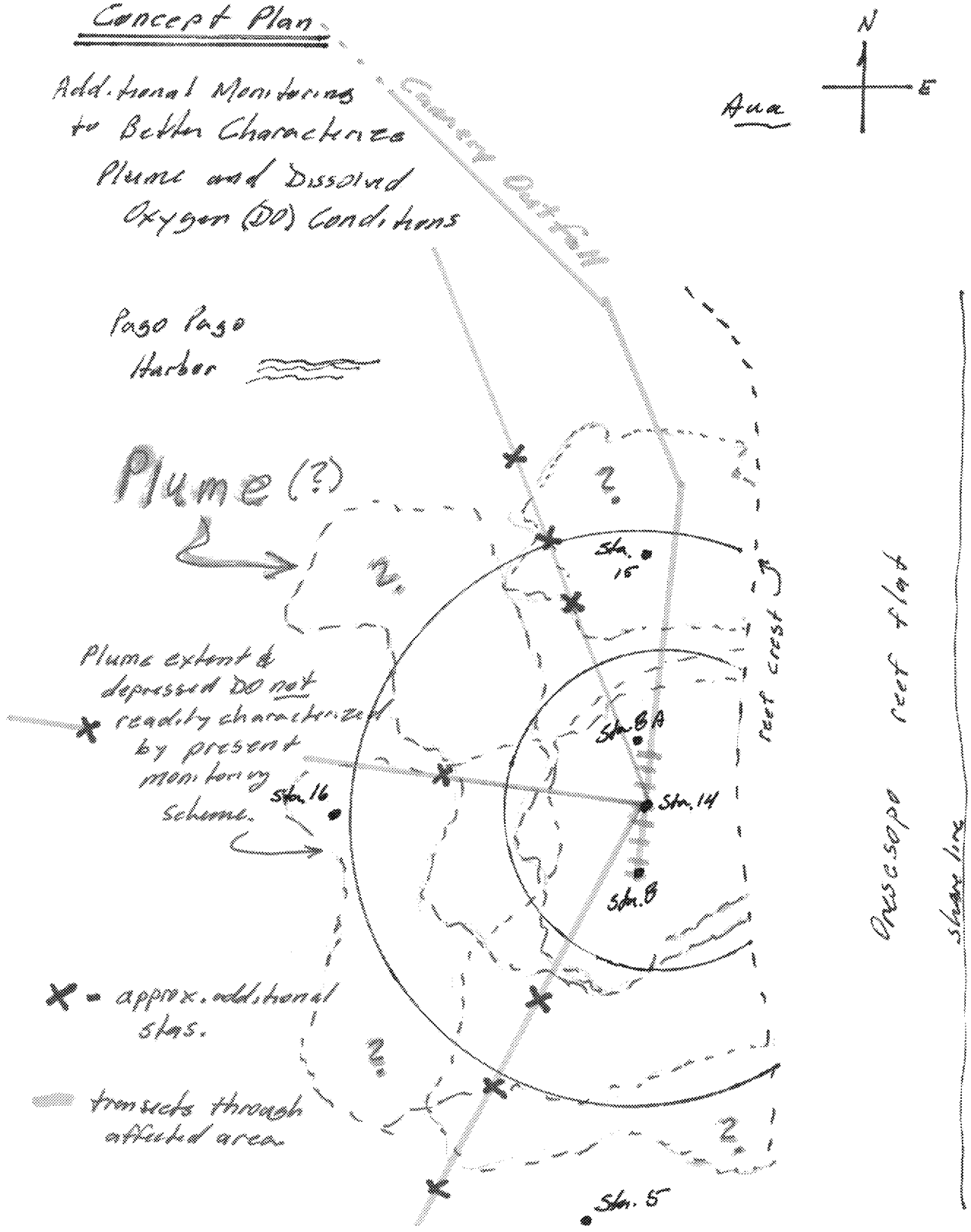
25 Sept 2018

Concept Plan:

Additional Monitoring to Better Characterize Plume and Dissolved Oxygen (DO) Conditions