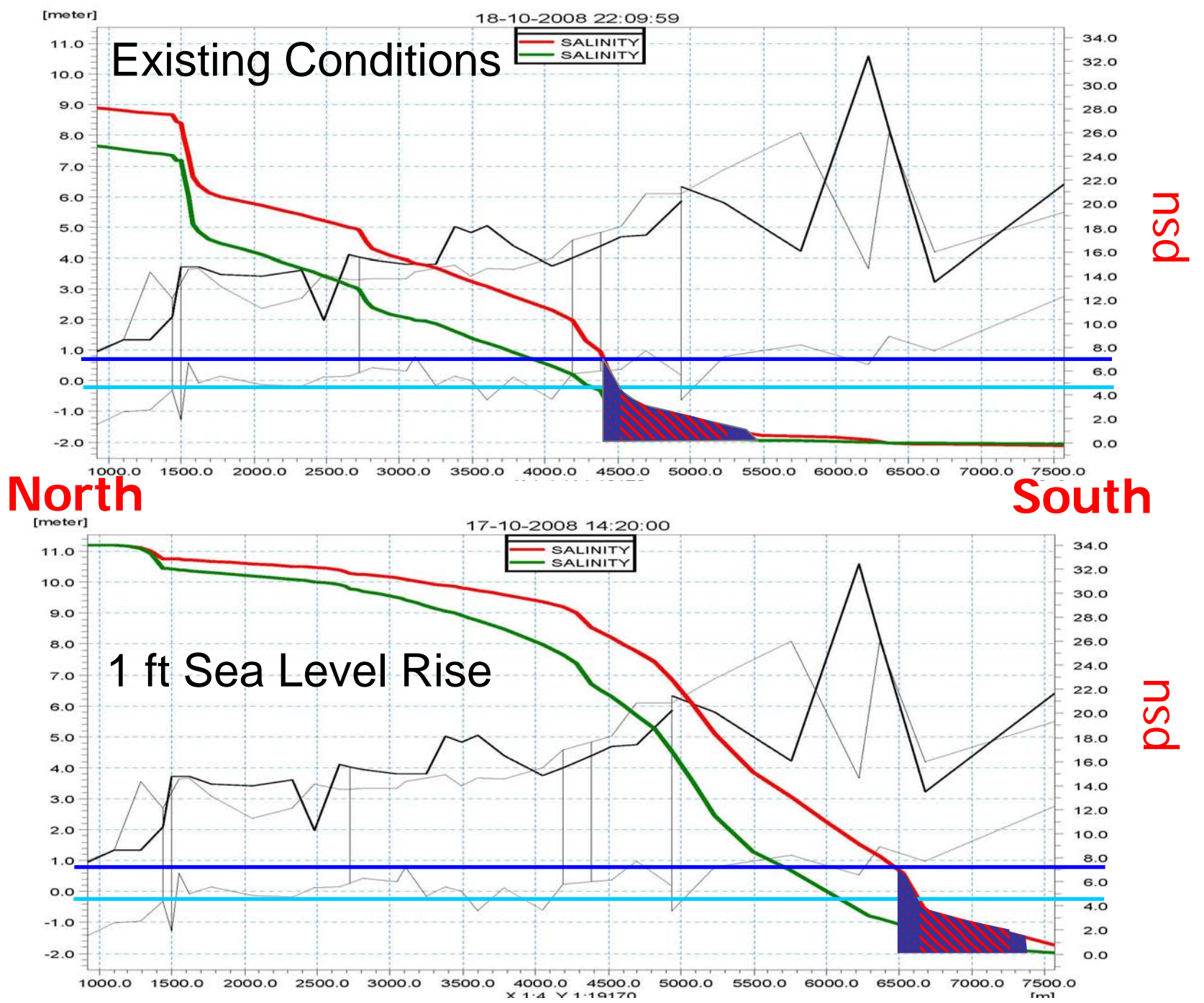


(A).
California
red-legged
frog

Striped area
refers to
published
tolerance
limits of eggs
to salinities,
and stipled
areas refer to
published
tolerances for
larva and
adults
(Jennings and
Hayes 1989).



(B).
Tidewater
goby

Striped area
refers to
previously
published
optimal salinity
ranges, while
stipled area
refers to the
ability of species
to tolerate
salinities up to
25 ppt (or even
higher on short-
term basis; Swift
2003).

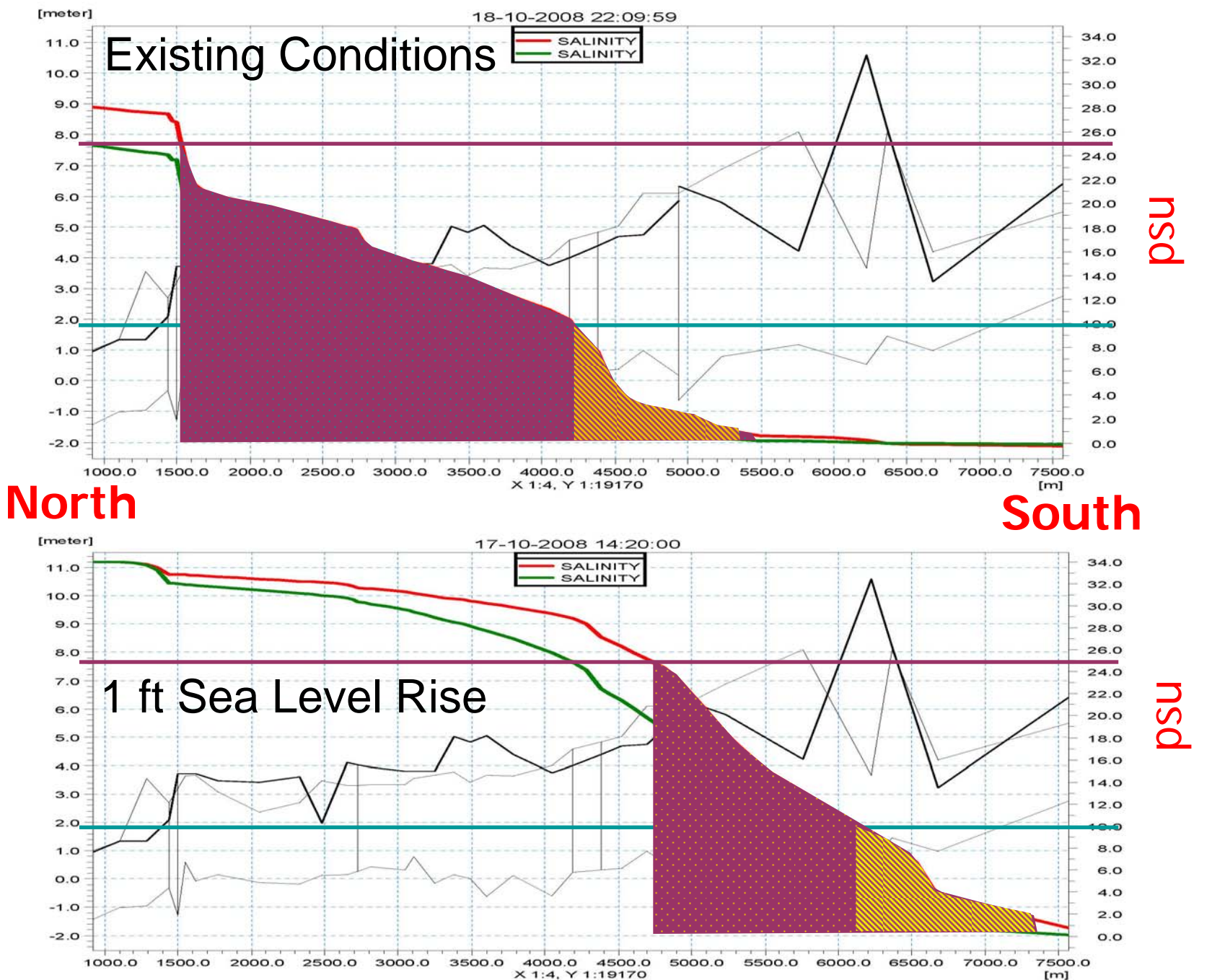


Figure 2. Potential changes in available habitat with increases in salinity for a freshwater species, California red-legged frog (A), and a brackish water species, tidewater goby (B), across a longitudinal gradient from north to south in the Giacomini Wetlands. Red line represents surface salinities, and green line represents bottom salinities. Available habitat is shown based on several published tolerance limits, some of which refer to different developmental stages. This gradient represents essentially a snapshot in time as salinity would be expected to change throughout the year and between years in responses to changes in precipitation between seasons and years. Modeling of salinity changes was conducted by Kamman Hydrology & Engineering (2009).

