Slide Explanation

- First four slides contain four plots. Each plot shows the relationship between three variables:
 - Hatchery program size (smolt release -axis)
 - Hatchery-origin exploitation rate (y-axis)
 - One of the following four variables: (1) Total Harvest (upper left), (2) Number of Natural-spawners (upper right), (3) pHOS (lower left), and (4) Average Relative Fitness of natural-spawners (lower right)
- For the first and second slide I used carrying capacity = 4000 in Ricker analyses; third slide capacity = 2000; and fourth slide capacity = 6000. Therefore, this analysis shows the combined effects of four parameters on the four resulting variables (total harvest, # natural spawners, pHOS and fitness)
- There are no annotations on the first slide. In the second through fourth slides I highlight the Total Harvest contours = 6000 and 21000. These contours represent the post-2015 and pre-2015 total harvest (rec and commercial), respectively. These contours are overlayed on the other three plots on each slide showing the program size and hatchery-origin exploitation rate combinations that will result in those two total harvests, and their effects on # natural spawners, pHOS and fitness.
- Along with the contours, I also highlight a single point in each plot (smolt release = 5,000,000 and hatchery-origin exploitation rate = 0.50). I highlighted this point to provide a standard reference point throughout all analyses. This point does not represent a policy alternative or preferred option.
- The last slide shows the relationship between smolt release, hatchery-origin exploitation rate and natural-origin exploitation rate across the three capacities (2000, 4000, 6000). The smolt release = 5,000,000 and hatchery-origin exploitation rate = 0.50 point is also included in this slide.
- Questions? Contact Ken Warheit (<u>kenneth.Warheit@dfw.wa.gov</u>)













