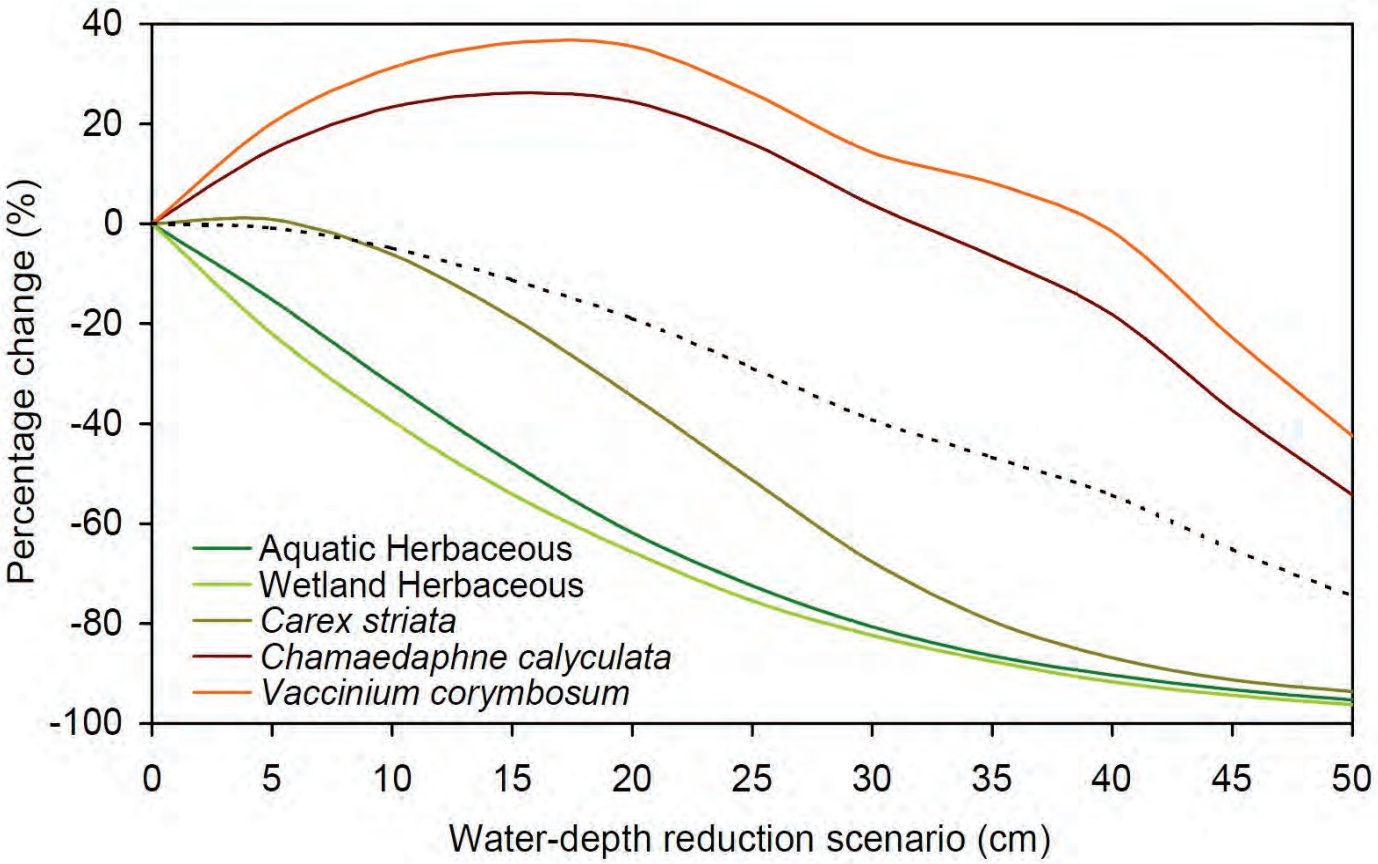
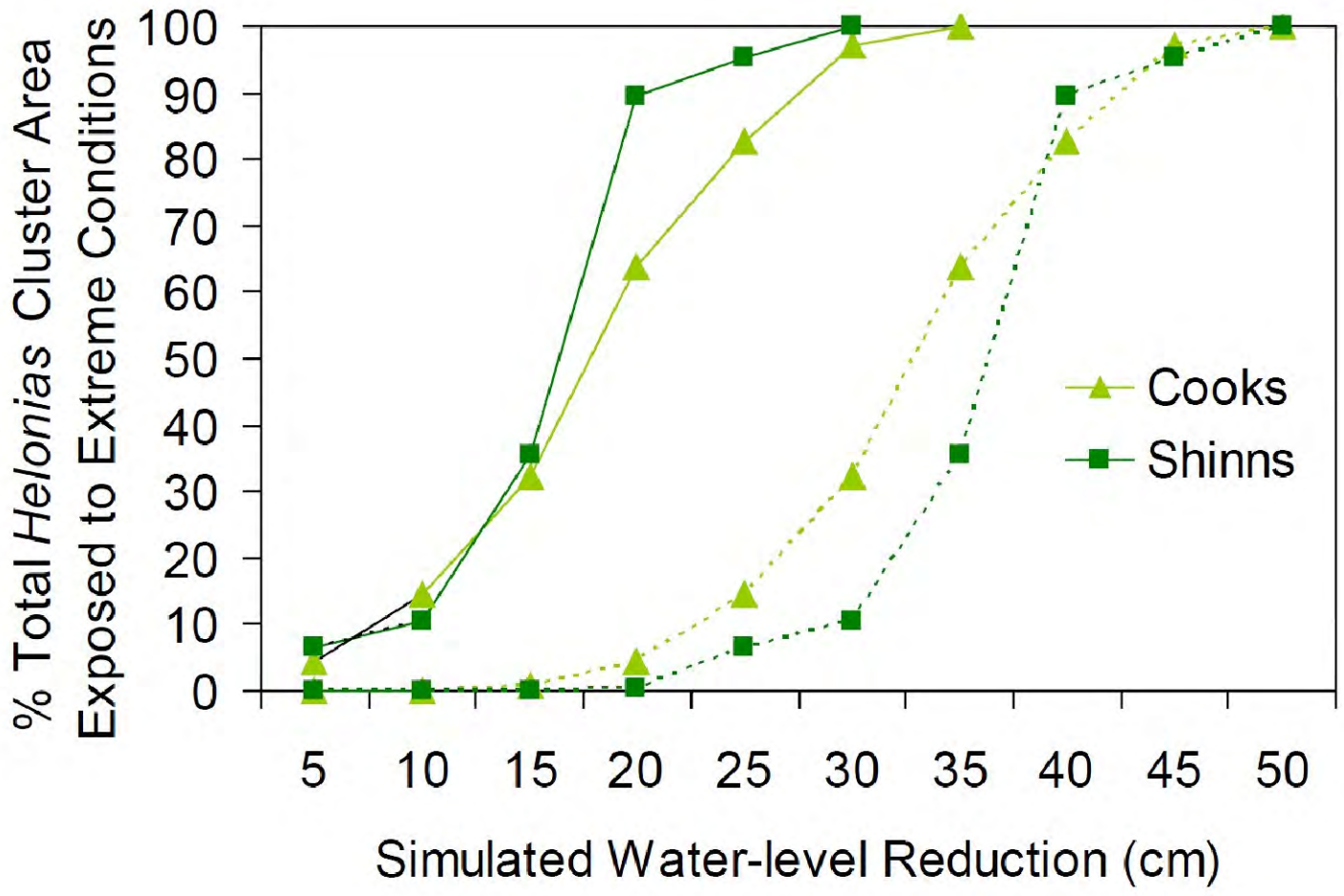
Graph 2 - Pond Vegetation Response to Reduction in Water Depth



The estimated percentage change in pond area with water levels suitable for dominant vegetation-patch types under various simulated water-depth reduction scenarios. The aquatic- and wetland-herbaceous types represent a combination of patch types. The dashed line represents the percentage reduction in all pond-vegetation types combined.

Source: Laidig, K.J. 2010. The Potential Impact of Simulated Water-level Reductions on Intermittent-pond Vegetation. NJ Pinelands Commission.

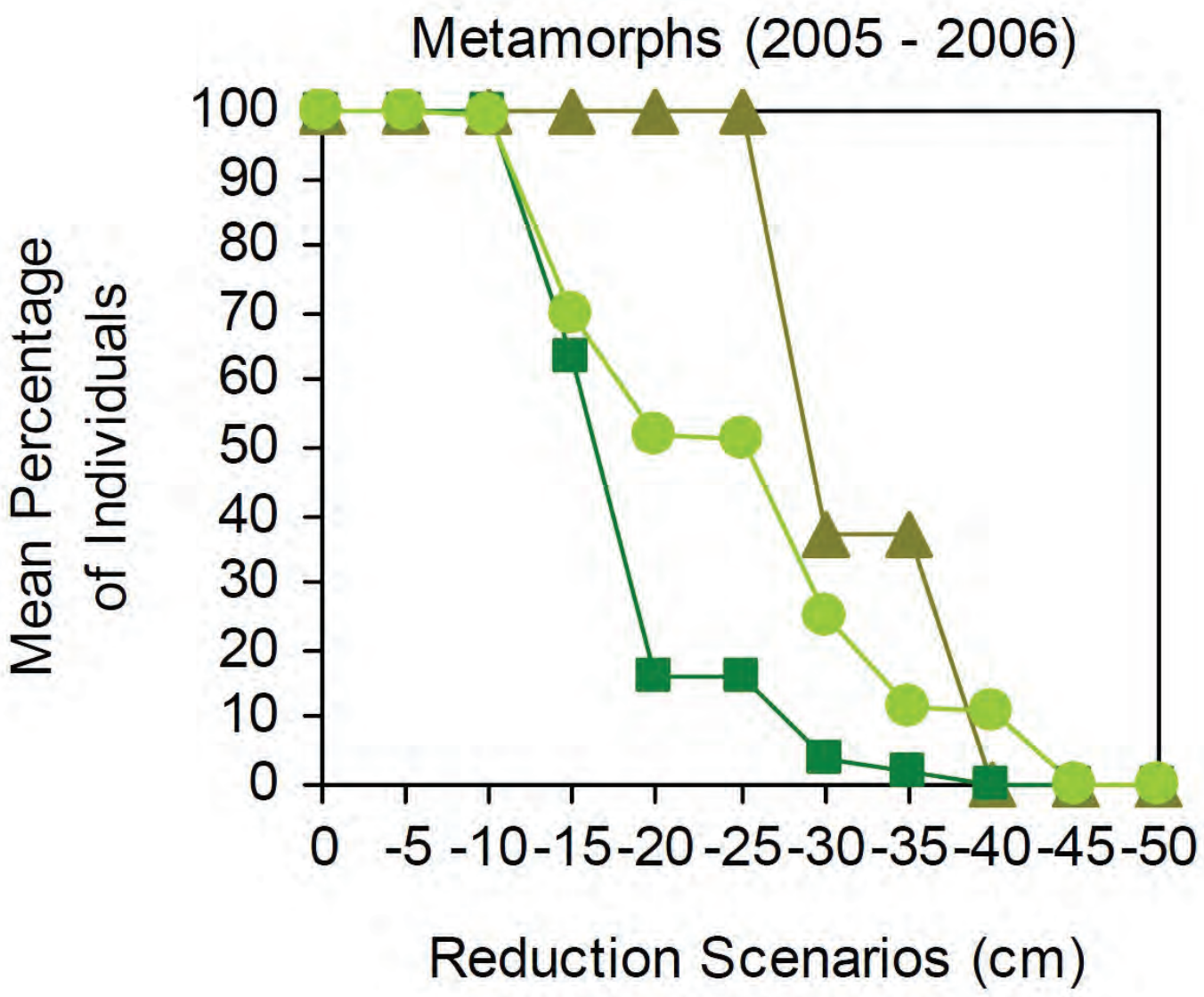
Graph 3 - Swamp Pink Response to Water Level Reduction



The estimated percentage of total Helonias cluster area exposed to extreme hydrologic conditions at various simu¬lated water-level reductions. Extreme hydrologic conditions are defined in this study in two ways, including the median water level at the drier end of the hydrologic gradient beyond which <10% of the total existing Helonias cover occurred (i.e., 20-cm water level for both sites; solid lines) and the water level beyond which Helonias was absent (i.e., 35 and 40-cm water levels at Cooks and Shinns, respectively; dashed lines).

Source: Laidig, K.J., R.A. Zampella and C. Popolizio. 2010. Hydrologic Regimes Associated with *Helonias bullata* L. (Swamp Pink) and the Potential Impact of Simulated Water-level Reductions. NJ Pinelands Commission.

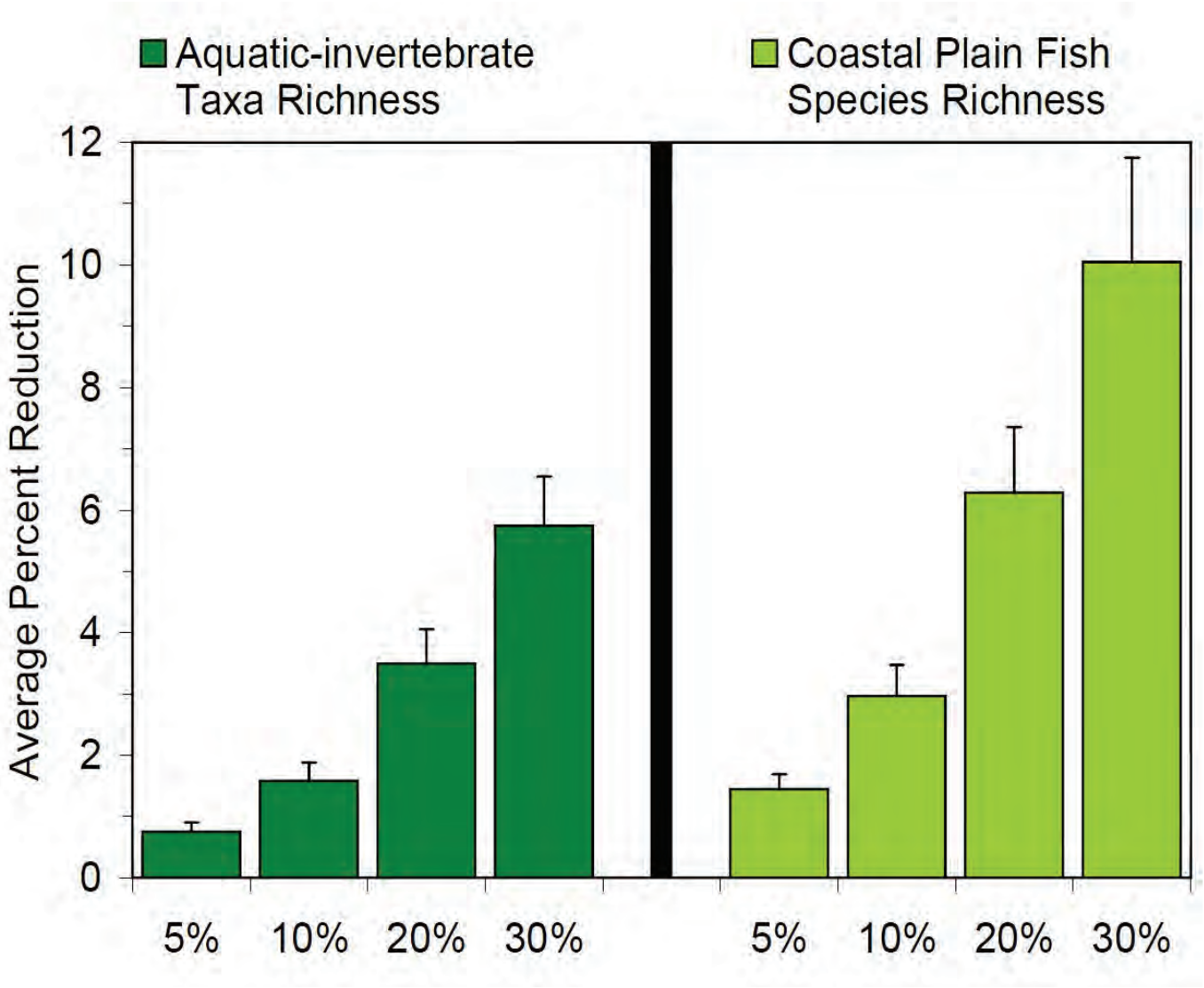
Graph 4 - Pine Barrens Treefrog Metamorphs Response to Water Level Reduction



Mean percentage of individual metamorphs for the Pine Barrens treefrog (squares), southern leopard frog (circles), and spring peeper (triangles) that occurred on drying dates for 2005 - 2006 for the actual water-depth measurements and for water depths reduced by 5 to 50 cm.

Source: Bunnell, J.F. and J.L. Ciraolo. 2010. The Potential Impact of Simulated Groundwater Withdrawals on the Oviposition, Larval Development, and Metamorphosis of Pond-Breeding Frogs. NJ Pinelands Commission.

Graph 5 - Aquatic Invertebrate and Fish Response to Streamflow Reduction



The average percentage (+1 s.e.) declines of aquatic-invertebrate taxa richness and coastal plain fish-species richness relative to a simulated 5%, 10%, 20%, and 30% reduction in average streamflow.

Source: Procopio, N. 2010. The Effect of Streamflow Reductions on Aquatic Habitat Availability and Fish and Macroinvertebrate Assemblages in Coastal Plain Streams. NJ Pinelands Commission.

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