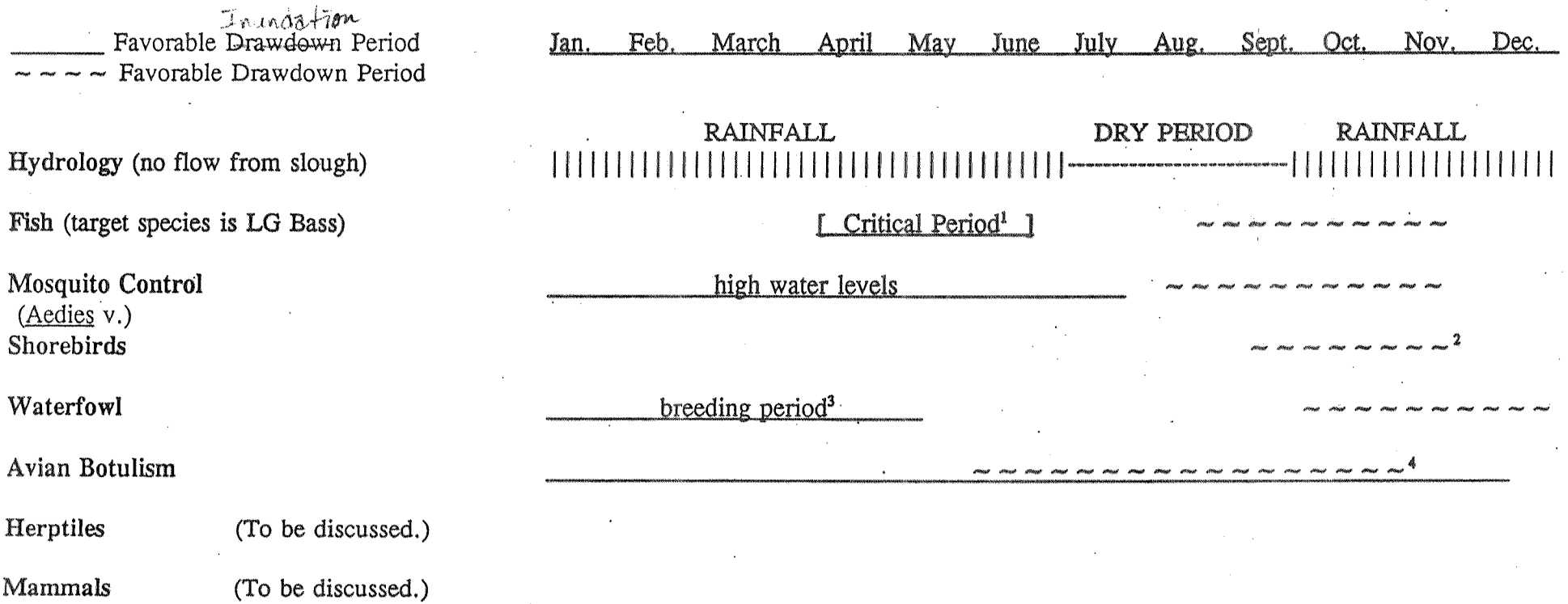


OPTIMUM WATER LEVEL CONTROL OF SMITH/BYBEE LAKES - Page 1  
 Suggested by Smith/Bybee Technical Advisory Committee



<sup>1</sup> 2 to 4 ft. of water over fairly firm substrate for spawning; any drawdown in this period may strand fry.  
<sup>2</sup> Drawdown water level should be sufficient to create mudflats for migratory species.  
<sup>3</sup> No significant or quick change in water levels during nesting period.  
<sup>4</sup> Rapid drawdown and temperatures > 25°C create conditions favorable for bacterial growth (i.e. fish stranding).

OPTIMUM WATER LEVEL CONTROL OF SMITH/BYBEE LAKES - Page 2  
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Jan. Feb. March April May June July Aug. Sept. Oct. Nov. Dec.

\_\_\_\_\_ Favorable Inundation Period  
 ~ ~ ~ ~ Favorable Drawdown Period

Vegetation - Control

Reed Canarygrass<sup>1</sup>

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Purple Loosestrife

\_\_\_\_\_

Smartweed (P. coccineum)

more information needed ~ ~ ~ ~ ~

Vegetation - Enhancement

Wapato

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Pacific willow (S. lasiandra)

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Ash (F. latifolia)

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Sedges (edge emergents)

Water surface level determines distribution.

Water Quality

- a) In minimizing increases in the rate of eutrophication, water surface level is less determinant than introduction of an external source of water lower in nutrients. Take advantage of freshets in Columbia and Willamette Rivers.
- b) Drawdown effects detrimental to water quality can be minimized by lowering levels in fall when temperatures are lower and rainfall input is forthcoming (in normal years).

Recreation

Wildlife Observation

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Boating

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<sup>1</sup> Shade and depth of inundation is also a factor in control.