Do we need to manage for iteroparity in steelhead trout?

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Steelhead trout iteroparity (repeat spawning) can be highly variable between populations, seasonal races, maturational strategies (stream vs. ocean-maturation), and annually. In the Columbia River basin, many populations of wild inland stream-maturing steelhead are listed as threatened or endangered (e.g., Snake River Basin). Increased natural and artificial kelt survival has been viewed as a potential tool for increasing iteroparity, especially among wild stocks. For example, artificial reconditioning of wild kelts in hatcheries has been successfully used to increase the number of natural spawners in Yakama River Basin. In the Snake River, research on the physiological and energetic constraints of natural emigrating kelts has been used to inform managers of actions that could improve kelt survival in the Federal Columbia River Power System (e.g., increased spill). However, historical records of iteroparity in the Columbia and Snake Rivers are poor and existing data indicates that repeat-spawning in inland stream-maturing steelhead may have always been poor (i.e., effectively semelparous). This begs the question, how much effort should be devoted to enhancing and/or managing for iteroparity in populations where repeat-spawning may have always been low? The focus of this presentation is to review current activities and questions related to kelt management in Columbia River inland stream-maturing steelhead.