

BIOLOGICAL SCIENCES – AQUATIC

RURAL STAKEHOLDERS AND ARCTIC GRAYLING MANAGEMENT IN THE BIG HOLE RIVER WATERSHED, MONTANA, USA

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In order to counteract Arctic grayling (*Thymallus arcticus*) population declines in the Big Hole River, rural stakeholders have partnered with natural resource managers on Candidate Conservation Agreements with Assurances (CCAA) activities. Surveys designed to assess attitudes towards grayling management practices were sent to 300 watershed residents in February 2008. We received 83 responses, mostly from men ≥ 50 years who identified their occupation as farming, ranching, government or retired. Respondents indicated grayling numbers had declined (31%) or stayed about the same (25%) in the last 10 yrs, and that it would be favorable for grayling numbers to increase (60%). Respondents chose drought, habitat loss and birds as factors strongly associated with declining grayling numbers. Activities listed as strongly associated with increasing grayling numbers varied, but often included drought management. Demographic trends among area residents match those typical of rural western communities; 62 percent are 45 years or older, 17 percent live below the poverty line, and 76 percent lack a college degree. The benefit of CCAA activities to the local “restoration” economy included an influx of nearly \$2 million since 2006. CCAA activities could be linked to future federal infrastructure, education and workforce training programs, with substantial benefits to the local populace.
