

Memorandum

To: Martin Heinrich, Rebecca Neri Zagal, ONRT
cc: David Chapman
From: Hillary Browning, Stratus Consulting Inc.
Date: 3/29/2006
Subject: Restoration and Electrofishing

This memo contains a summary of the discussions we have had with local fish biologists, and specifically my phone conversations with Mike Sloan of NMDGF and Juan Martinez of USFS regarding the use of electrofishing to control competing species.

The consensus is that chemical treatment is the most efficient, cost-effective, and best long-term solution to effectively eradicate fish species from a stretch of river.. However, there is also agreement that pushing through a project involving piscicide treatment at this time and location (in the Red River watershed) would be very difficult, if not impossible, due to political and administrative constraints. The utilization of electrofishing to remove non-native species, while not the ideal solution, could benefit and help to sustain valuable native Rio Grande Cutthroat (RGCT) populations as long as the program includes a long-term monitoring and maintenance plan with resources to support those activities.

Mike Sloan said that his preference would be to use piscicides in the restoration projects (for example, on parts of Cabresto Creek) or to implement projects in the Valle Vidal (where there are numerous reaches that contain only pure RGCT and limited piscicide use has been approved where other species need to be removed). I then asked for his thoughts given a couple of constraints 1) the political infeasibility of chemical treatment and 2) a strong preference for doing work in the Red River watershed. He responded that he does not think electrofishing will hurt the fish populations and that if 1) secure barriers were in place and 2) funding was assured for an aggressive and long-term maintenance plan (repeated electrofishing) then the projects could do some good. My impression is that Mike is fully aware of the administrative infeasibility of using piscicides in the Red River watershed and understands the constraints but that he is a strong proponent of piscicide use as an important cost-effective tool for native species restoration projects.

Juan Martinez also thinks that electrofishing is not a permanent solution, but he feels that the installation of a secure barrier and increasing the degree or extent of electrofishing on Cabresto would further benefit the RGCT population. He said that these types of projects are commonly done on the Carson National Forest and that a maintenance plan is key to their success. Juan estimated a schedule of aggressive electrofishing (multiple treatments per year) for two or three years, then treatments every three years for ten years, and then every five years for ten years after that. He said that depending on the situation, it could be possible to stop treating the reach after

20 years or so. While Juan agrees that electrofishing is not an ideal restoration technique, he thinks that failing to control for the invasive species could lead to severely deteriorated populations of natives in as short as just a few years. Electrofishing has been conducted by the Forest Service for more than five years on upper Cabresto to keep the numbers of Brook trout low.

It is important to consider the opinions of the specialists we have spoken with in the context of the Trustees' restoration goals and the screening and evaluation criteria used to prioritize projects. A project involving piscicides in the Red River watershed might score very high on technical feasibility but very low (or zero) on administrative feasibility. A project in the Valle Vidal scores high on both technical and administrative feasibility but scores low on the proximity to injury criterion. A project in the Red River basin that utilizes electrofishing scores high on proximity to injury and administrative feasibility, but lower on technical feasibility or project longevity (depending on how you interpret these criteria). The process of restoration project selection is an exercise in optimization of many variables and requires the consideration of multiple stakeholders, priorities, and criteria. From our discussions and evaluations thus far, it is our understanding that an electrofishing project would achieve reasonable levels of technical feasibility and project longevity, and most importantly, could provide a net environmental benefit in close proximity to the injury, as long as the sites are selected carefully and long-term maintenance is adequately funded.