**Technical Memorandum 3-8**

**Stream Fish Populations Upstream of Englebright Reservoir**

# Attachment 3-8D

## Length-Weight Regressions for Collected Fish

Yuba River Development Project
FERC Project No. 2246

November 2013

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# 1.0 Introduction

This document presents length-weight regression for fish species captured by electrofishing during field efforts for Study 3.8 *Stream Fish Populations Upstream of Englebright Reservoir* over the 2012 and 2013 seasons. Regression was used to compute relative condition factors using the power function W=aLb (Anderson et al. 1996). Graphs are organized by species and year for each stream. Condition factor of individual fish by species and location is provided in Attachment 3-8C.

# 2.0 Length-Weight Regressions for Middle Yuba River Fish Population Monitoring Sites

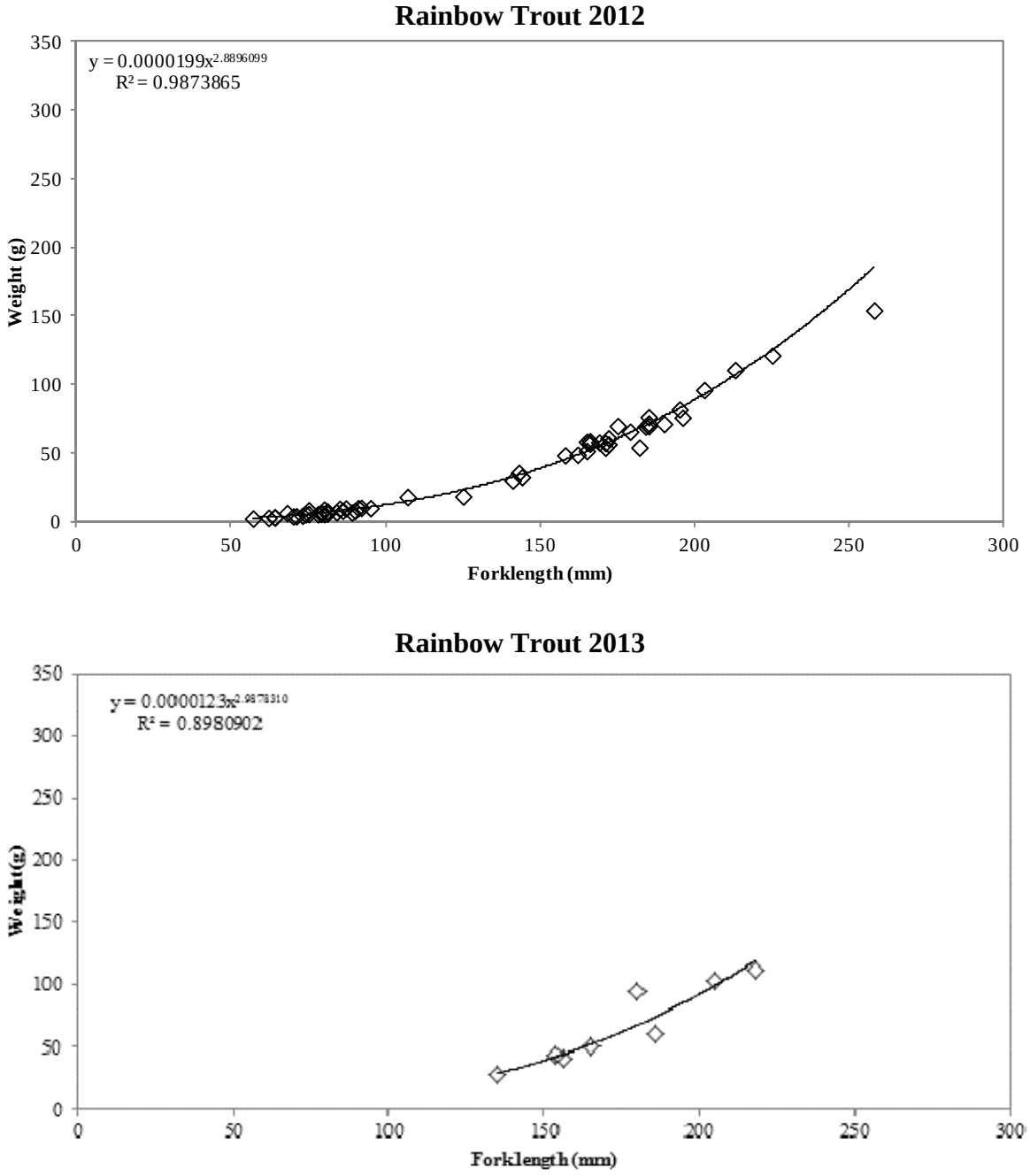



**Figure 1. Length-weight regression for rainbow trout captured during electrofishing surveys on Middle Yuba Sites during the 2012 and 2013 field sampling efforts.**

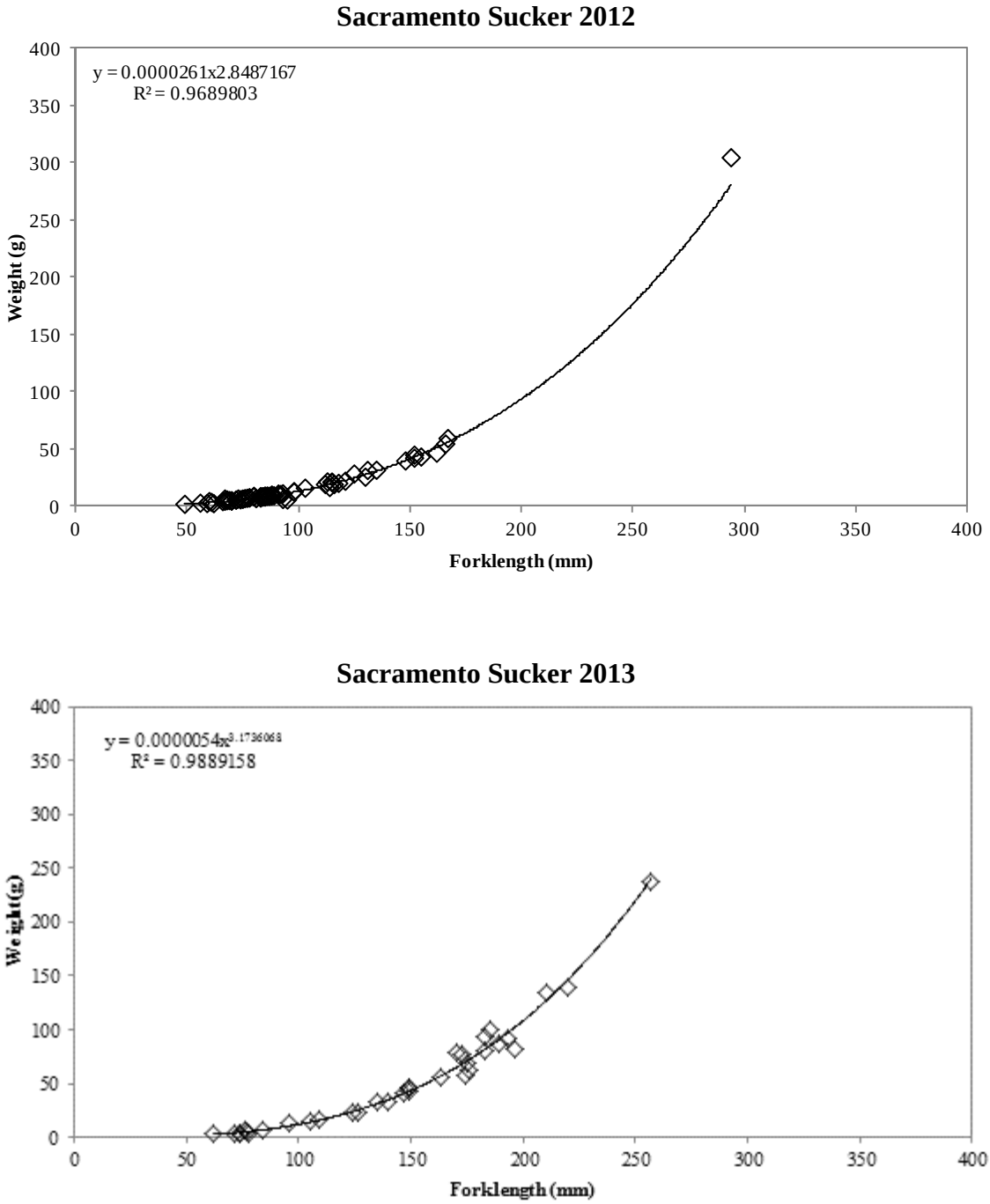
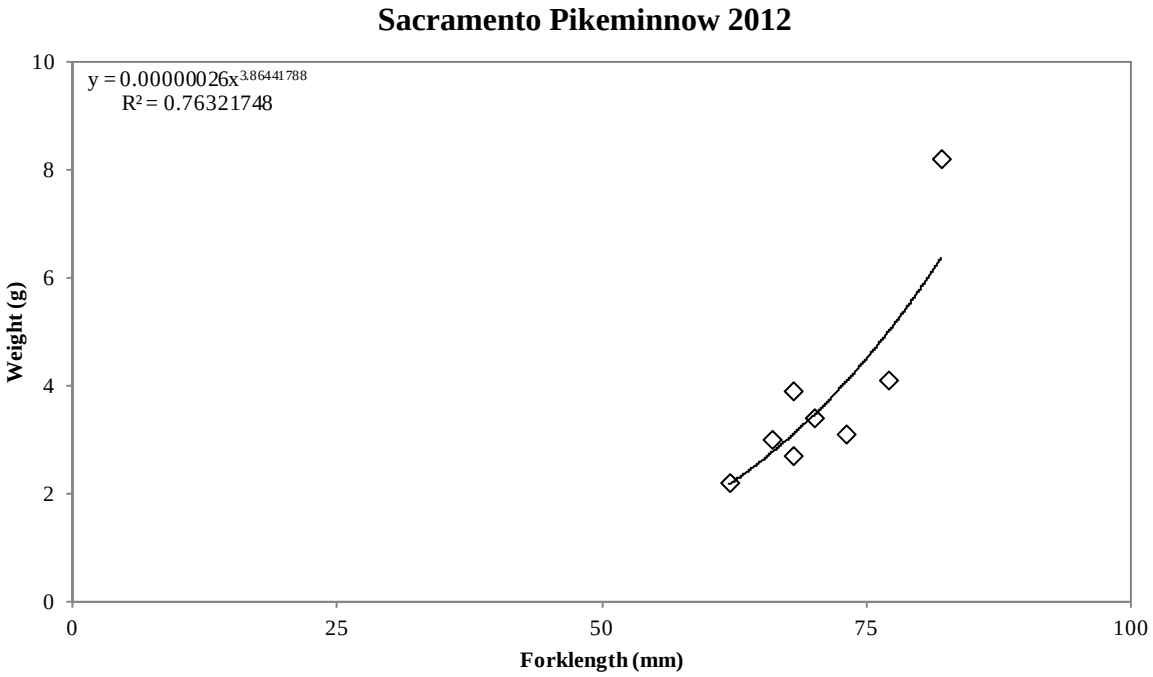



**Figure 2. Length-weight regression for Sacramento sucker captured during electrofishing surveys on Middle Yuba Sites, during the 2012 and 2013 field sampling efforts.**



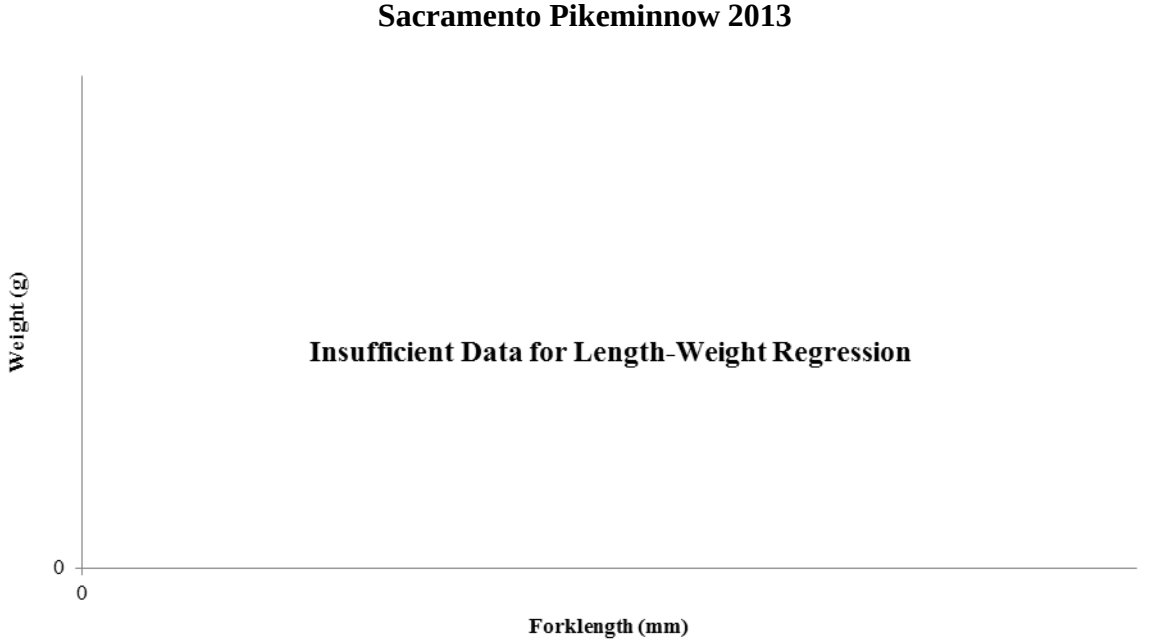
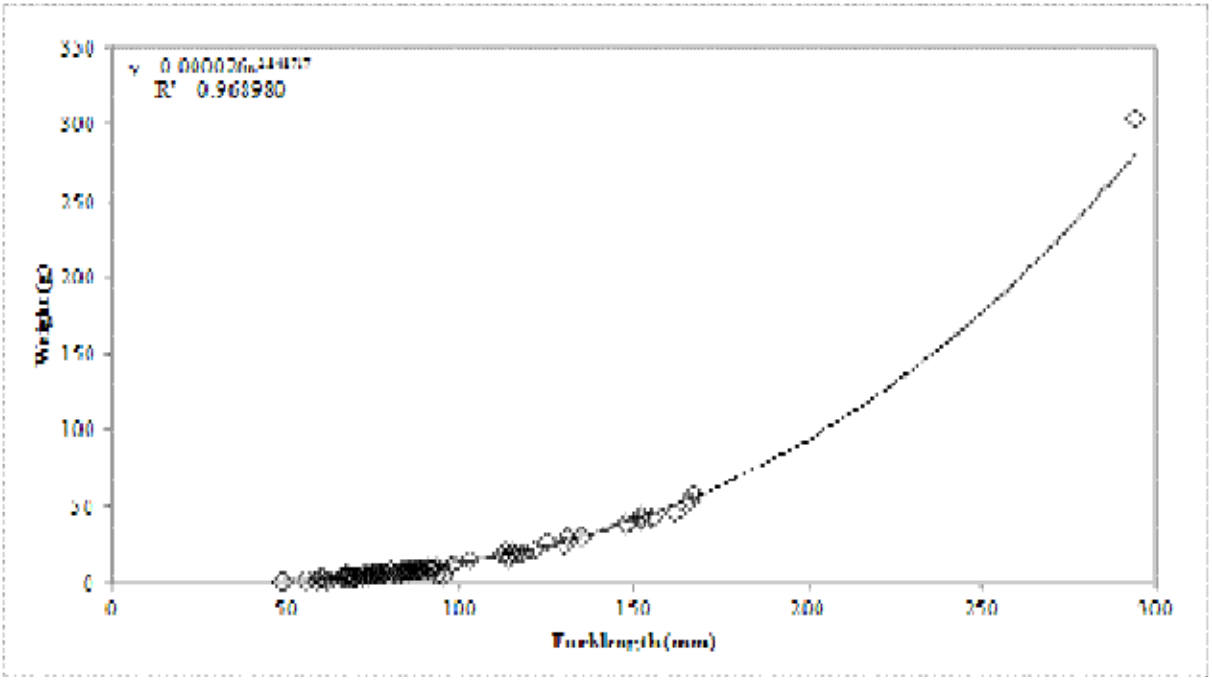




**Figure 3. Length-weight regression for Sacramento pikeminnow captured during electrofishing surveys at Middle Yuba Sites, during the 2012 and 2013 field sampling efforts.**

**Smallmouth Bass 2012**




**Smallmouth Bass 2013**

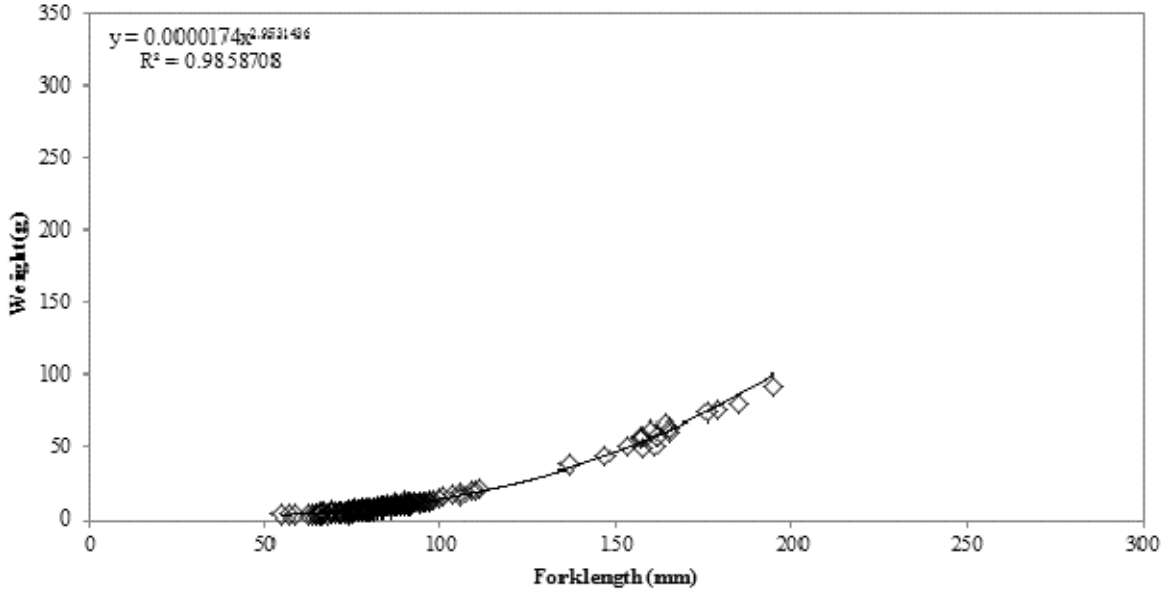
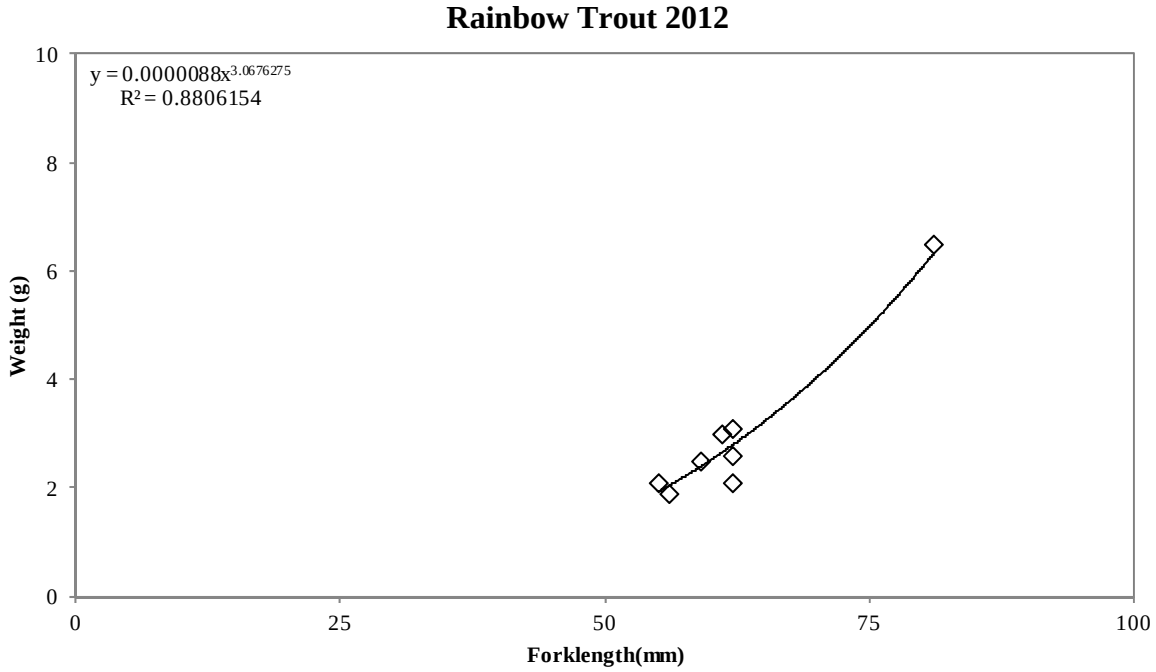



**Figure 4. Length-weight regression for smallmouth bass captured during electrofishing surveys on Middle Yuba Sites, during the 2012 and 2013 field sampling efforts.**

# 3.0 Length-Weight Regressions for the North Yuba River Fish Population Monitoring Site



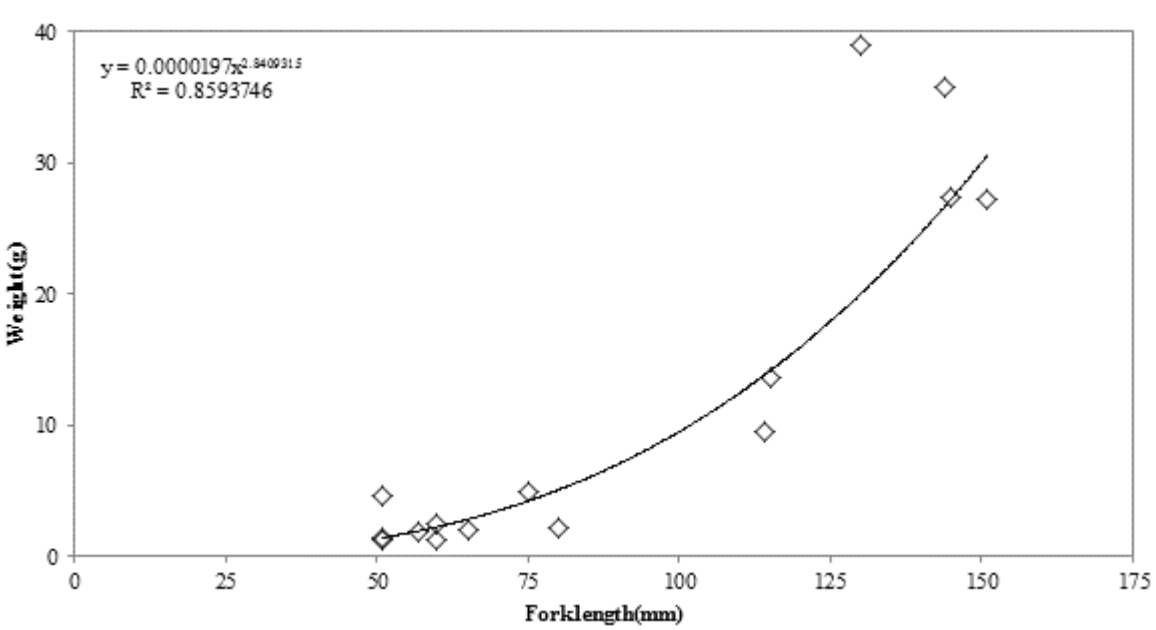




**Figure 5. Length-weight regression for rainbow trout captured during electrofishing surveys at the North Yuba Site, during the 2012 and 2013 field sampling efforts.**

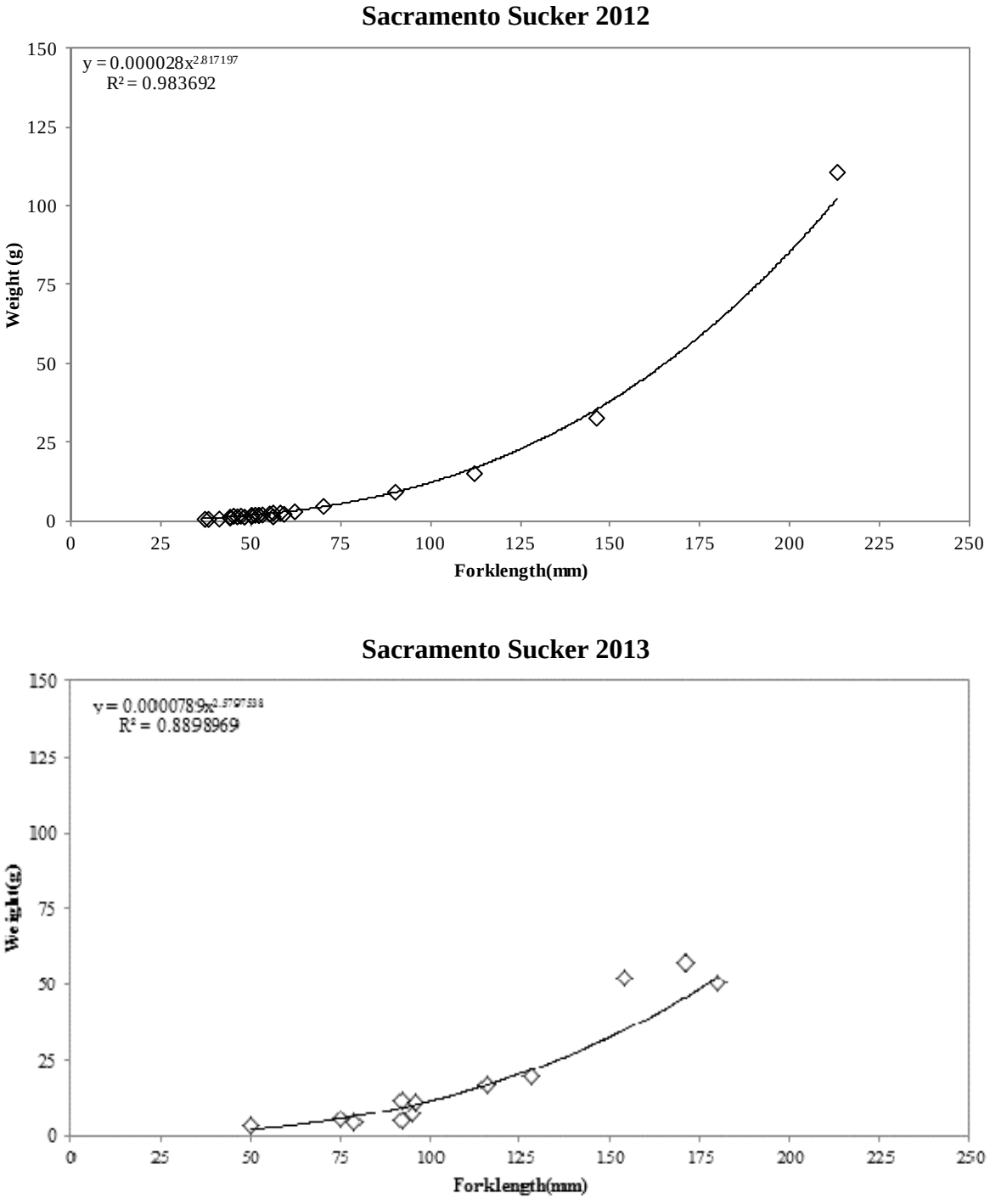
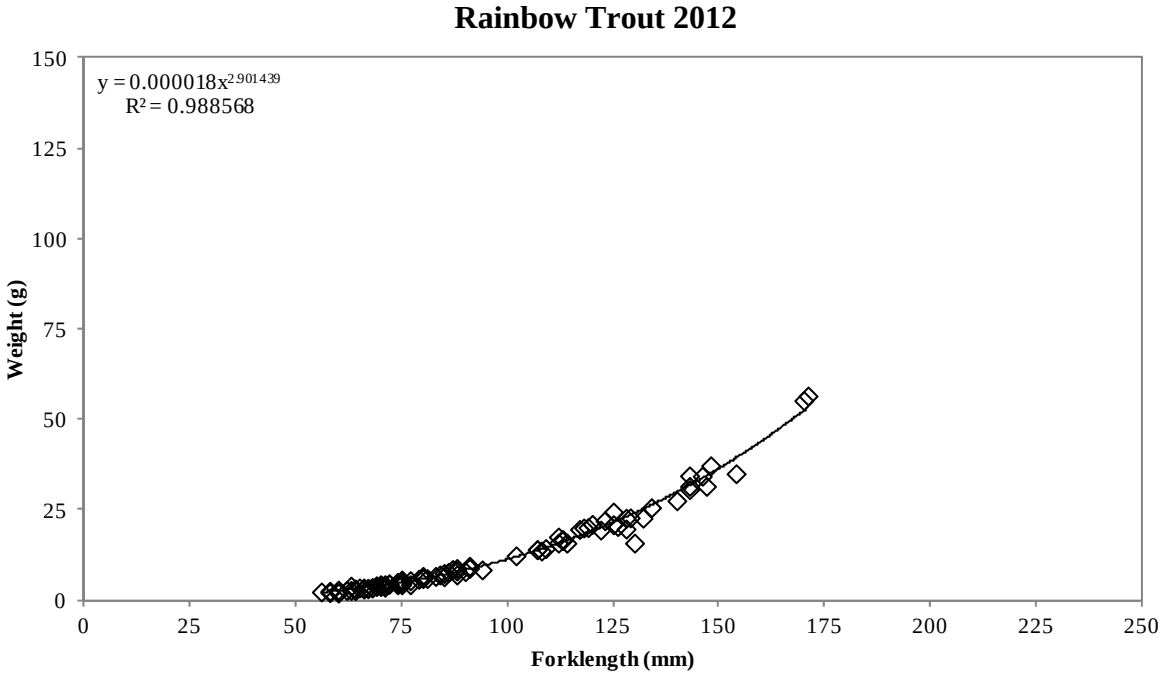



**Figure 6. Length-weight regression for Sacramento sucker captured during electrofishing surveys at the North Yuba Site, during the 2012 and 2013 field sampling efforts.**

# 4.0 Length-Weight Regressions for Surveys at Oregon Creek Fish Population Monitoring Sites



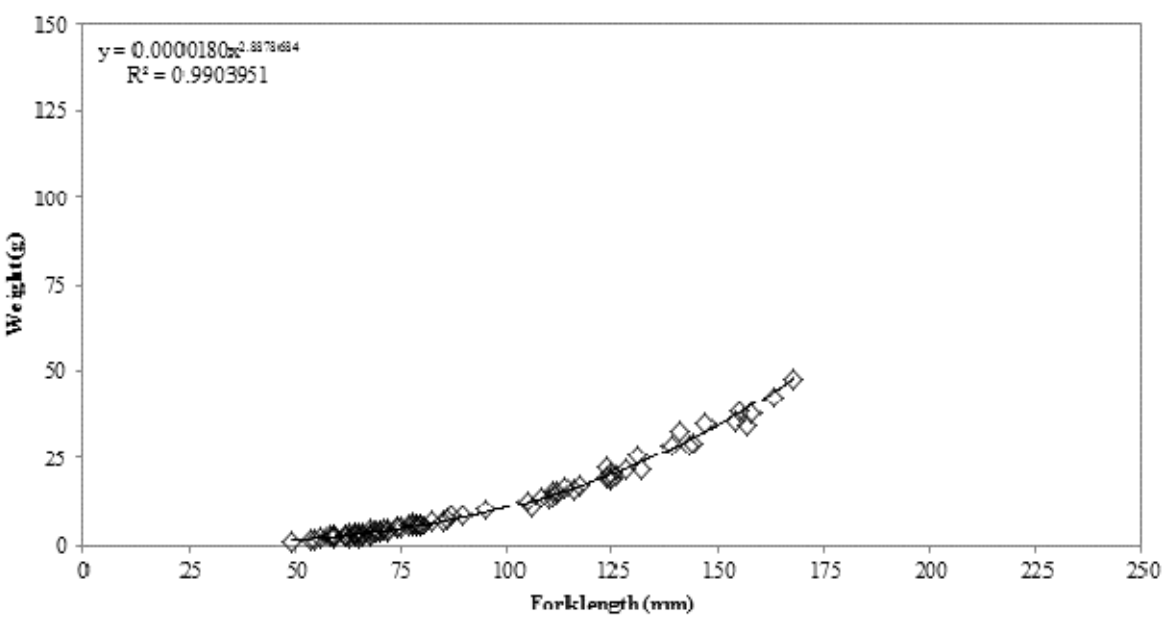




**Figure 7. Length-weight regression for rainbow trout captured during electrofishing surveys on Oregon Creek Sites, during the 2012 and 2013 field sampling efforts.**

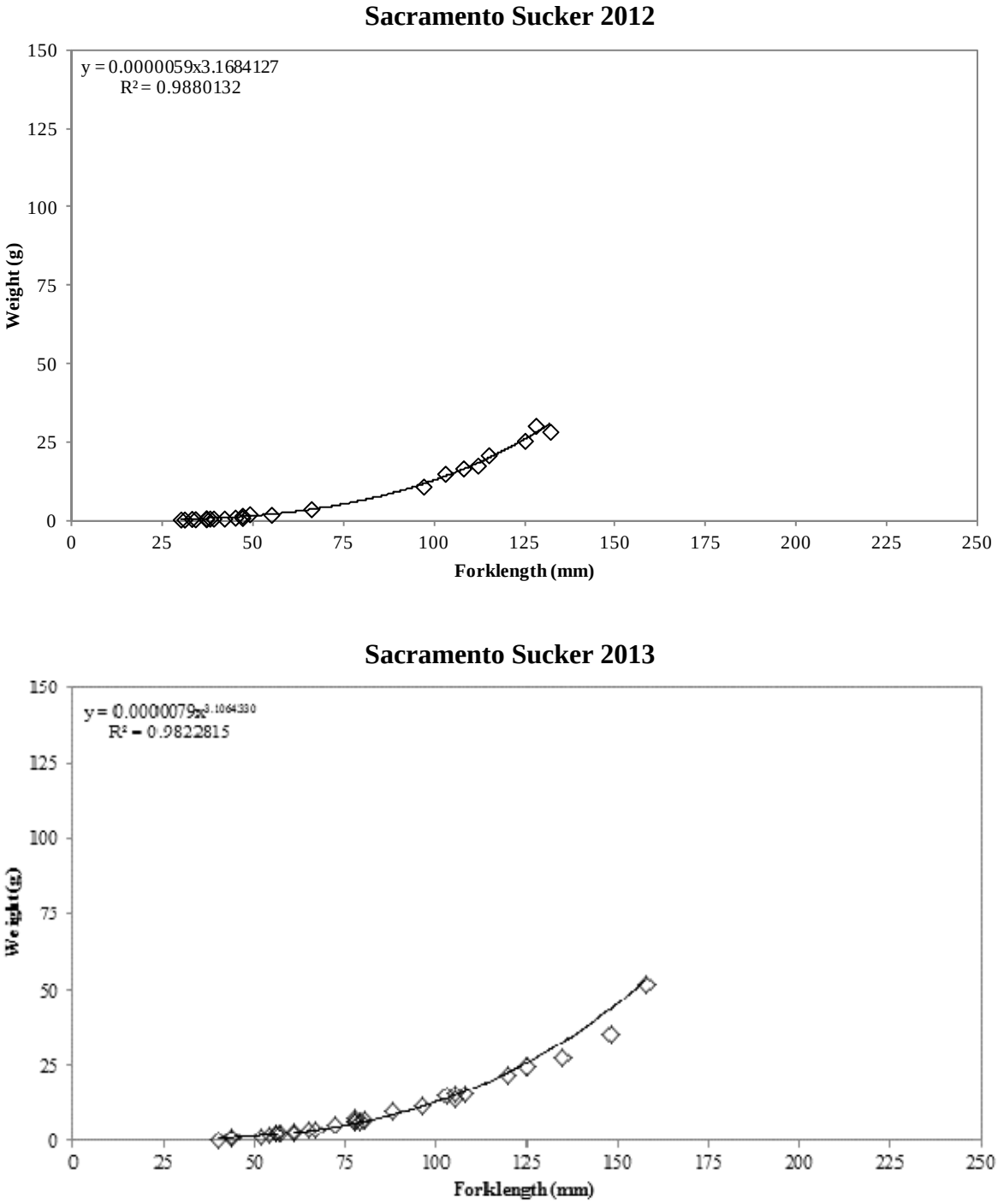
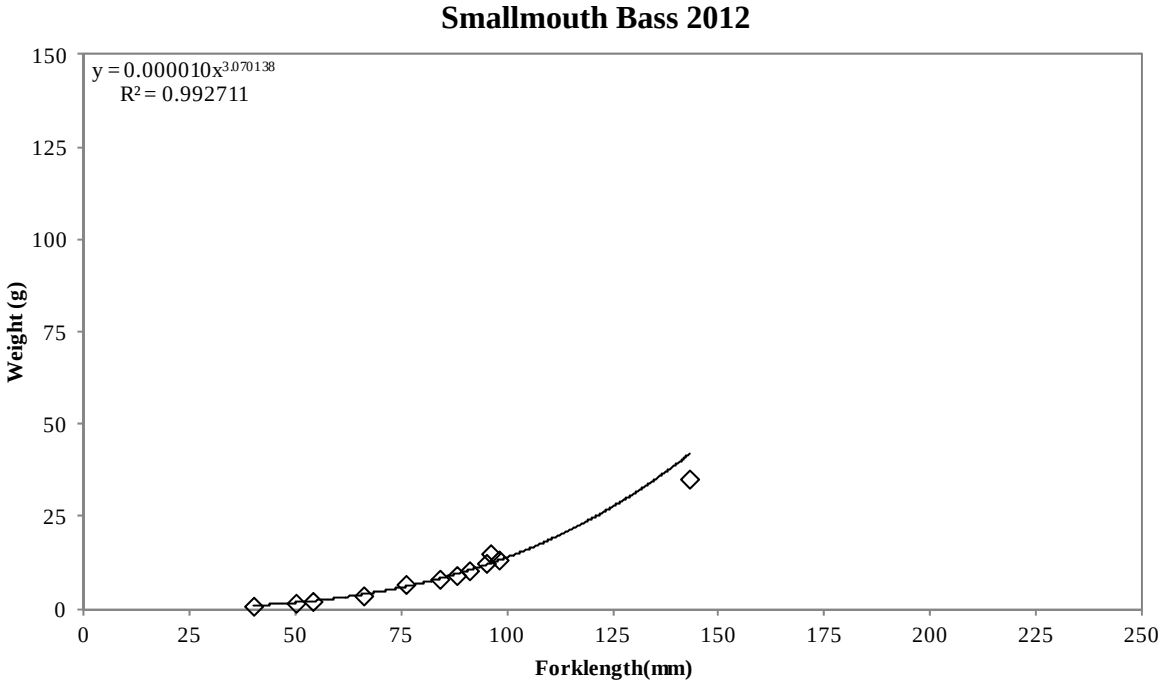



**Figure 8. Length-weight regression for Sacramento sucker captured during electrofishing surveys on Oregon Creek Sites, during the 2012 and 2013 field sampling efforts.**

# 5.0 Length-Weight Regressions for Surveys at Yuba River Fish Population Monitoring Sites



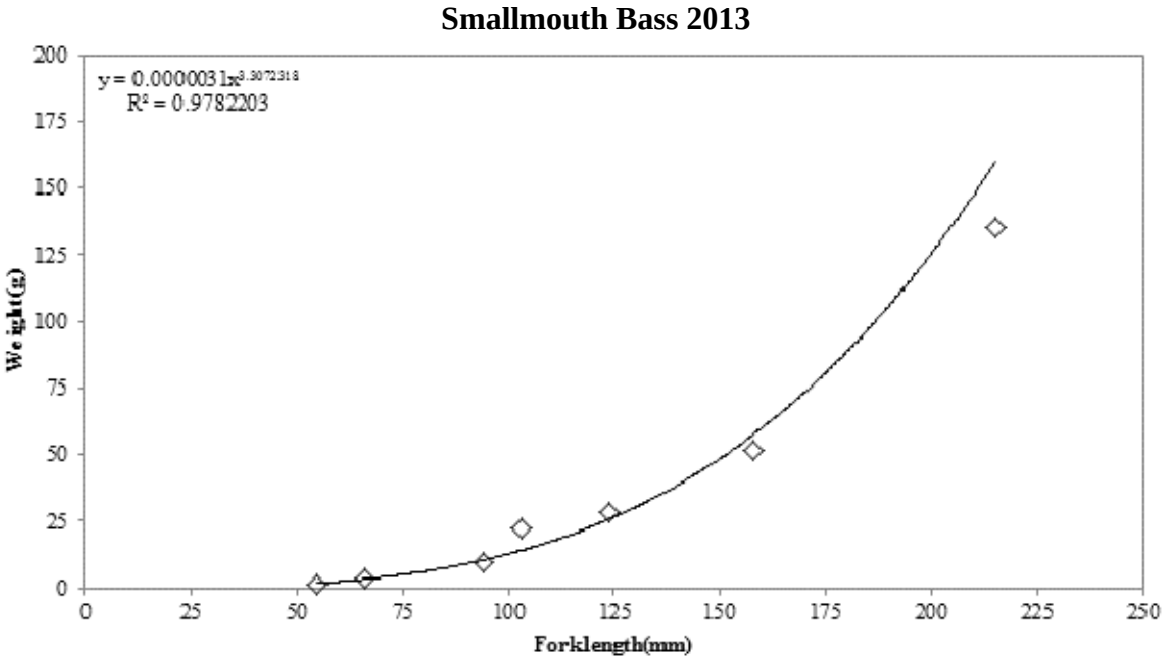




**Figure 9. Length-weight regression for smallmouth bass captured during electrofishing surveys on Yuba River Sites, during the 2012 and 2013 field sampling efforts.**