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TO: Colorado Water Conservation Board Members

FROM: Joe Busto, Watershed and Flood Protection Section

DATE: November 19-20, 2014 Board Meeting

AGENDA ITEM: #10 – **Rio Grande Basin Runoff Forecasting Project Update**

Introduction

Water Supply forecasts are important in the Rio Grande. They are inputs into modeling and water administration for both surface and ground water. A few years ago, several agencies were convened to focus in on the Rio Grande and methods to improve the forecasting process. Staff will give an overview of the three of those five projects that have gone forward.

NOXP is the top federal mobile radar and is parked at the Alamosa airport all winter creating precipitation estimates in the Conejos Basin. A suite of newer distributed operational snowpack and hydrologic models are running for this project. Six new gauging stations have been deployed near Platoro Reservoir. Riverside Technologies inc. was also hired to develop a compact compliance DSS support tool for the DWR.

Staff is also currently in contract negotiations to hire the NASA- Airborne Snow Observatory as a partner. If successful, NASA will create periodic airplane based snow depth and snow water estimates in the Rio Grande above Del Norte as inputs for the modeling for forecasts. All of this will be compared to existing NWS River Basin Forecast Center methodologies to determine effectiveness.

The project goals are to develop new rich spatial sources of data and modeling for forecasts, build a business case for radars in Colorado, and explore a transition away from reliance on previous hydrology and handful of data points to more detailed snowpack information and modeling.

Staff Recommendation

This is an informational item with no formal board action requested.