ATTACHMENT 1

RGDSS Memorandum

Final

TO: Ray Bennett
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SUBJECT: RGDSS Surface Water - Return Flow File Automation – Phase 1a
DATE: February 24, 2000
CC: Randy Seaholm

Introduction

This memorandum represents delivery associated with development of the return flow file automation utility and associated input files. The objective of this task is as follows:

The development of tools and methodologies for automating the creation of the StateMod return flow input files from the Unit Response Factor (URF) tables, the URF river reach definitions and topology, the URF zone map, the Service Area Map, and the node topology in the StateMod network input files.

Approach

The approach for automating assignments of return flow locations and URFs is fully described in the **makertn** utility documentation.

Summary

The development, testing, and documentation of a new CDSS StateMod utility, **makertn**, has been completed. This utility automates the process of creating the StateMod return flow input file, *.rtn, from unit response functions (URFs) developed for the basin by groundwater modeling. **makertn** combines the locations of irrigated parcels, the URF zone, river reach locations, the StateMod River Network file, *rg.rin*, and a predefined set of return flow nodes within each river reach to assign URFs to each structure and create the return flow file, *rg.rtn*.

Comments and Concerns

The **makertn** documentation has been prepared in the same format and style as documentation for other CDSS utilities and is attached to this memo.

Attachments

1. **makertn** Utility Documentation