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# Geological Annotated Bibliography and Database

# for the Investigation of Demineralization Concentrate Management Project

# GEOLOGICAL ANNOTATED BIBLIOGRAPHY AND DATABASE

IN SUPPORT OF

## EVALUATION OF DEMINERALIZATION CONCENTRATE MANAGEMENT STRATEGIES – TASK C.1 AND THE DEMINERALIZATION CONCENTRATE MANAGEMENT PLAN – TASK C.2

FOR THE

## INVESTIGATION OF DEMINERALIZATION CONCENTRATE MANAGEMENT PROJECT

BY

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# INTRODUCTION

This annotated bibliography is part of the overall scope of the Investigation of Demineralization Concentrate Management Project and is specifically presented in fulfillment of the requirements of Task B.1.b of the project as required by the St. Johns River Water Management District (SJRWMD) and detailed in Contract No. SE418AA. The task requires preparation of an annotated bibliography and subject matrix representing the body of knowledge concerning the feasibility of subsurface injection as a means of demineralization concentrate management within the study area.

The bibliography covers four areas of hydrogeologic interest:

- Potential for Deep Well Injection
- Potential Concentrate Discharge Regimes
- Potential Source Regimes
- Potentially Acceptable Discharge Options

The bibliography is the result of a literature survey and review of publications specifically related to investigations of the surface and groundwater waters of the St. Johns River Water Management District (SJRWMD) and of the hydrologic, geologic, and quality parameters associated with those waters. The information in those reports and publications has been entered into an electronic database that allows a search of the documents through various listings and tables. This database lists documents that will be used to prepare the final Demineralization Concentrate Management Plan and also lists documents that may not specifically be used in preparing the plan but which contain information of related interest. A data field showing "Reference used in TM" with a yes/no entry in the field, will be used to identify if the reference was used in the final plan.

For presentation purpose, the database is alphabetized by author, as is the standard for reference formats. Multiple author listings are further arranged by publication date.

## BIBLIOGRAPHY CONTENTS

Reiss Environmental developed the bibliography using Microsoft Access software. Each bibliographic entry contains the name of the author, the title of the publication, the date and an abstract of the document. The abstracts used are those provided by the author in the publication. When a

publication contained no abstract, a short abstract was prepared from the summary and conclusions or from the text of the publication.

Data fields are available to search the bibliography by author, by title, by the date of publication. The bibliography can also be searched through a sortable matrix that is based on subject area. The main subject area of each bibliographic listing is ranked by a number system from one to four. When a number, representing a topic code, enters the first ranking, it represents the most significant subject area of that publication. Therefore, if it enters in the second ranking it represents the second most significant subject area and so on. Up to four subject areas and four rankings are applied to each publication. Many of the entries are associated with more than one code and therefore can be cross-referenced to more than one subject area.

The bibliography includes a total of 138 individual entries.

## USER GUIDE

The data has been entered using Microsoft Access 2000 as the electronic search engine. The database is programmed to use all the procedures associated with the software. The database structure has two table:: *tblCode* and *tblSTJOHN*. The *tblCode* listed in Table 1 contains the topic codes, identifying subject matrix and number of bibliographic entries per topic code.

Table 1. Topic codes and bibliographic entries

| Topic Number | Topic/Subject Area | Number of Bibliographic Entries |
|---|---|---|
| 1 | Hydrology | 133 |
| 2 | Geology | 114 |
| 3 | Deep Well Injection | 54 |
| 4 | Water Quality | 114 |

### Description of Reports

There is a total of six reports, two based on table data and four based on queries. Table 2 contains the report names and association with tables and queries.

A description of the database content follows:

- *tblSTJOHN*: This table contains information such as author, date of the publication, title, codes, reference to the technical memoranda (TM), publication, and abstract.

- Author query contains all the names of the authors within the database.

- Topic 1 refers to all the publications related to Hydrology.

- Topic 2 refers to all the publications related to Geology.

- Topic 3 refers to all the publications related to Deep Well Injection.

- Topic 4 refers to all the publications related to Water Quality.

- Publication Query contains all the publications in alphabetical order.

- Publication Form: This form will facilitate the data entry process. All updates should be entered using this form to avoid altering the format of the database.

- Topic 1 Report is a printable form of all the contents of the database that relate to Hydrology.

- Topic 2 Report is a printable form of all the contents of the database that relate to Geology.

- Topic 3 Report is a printable form of all the contents of the database that relate to Deep Well Water.

- Topic 4 Report is a printable form of all the contents of the database that relate to Water Quality.

- Publication w/Abstract Report is a printable form of all the information contained in the database, sorted by author and date.

- Publication /No Abstract Report is a printable form of all the information in the database without the abstract.

Table 2. Report names and association with table and queries

| Report | Table | Query |
|---|---|---|
| Publication w/ Abstract Report | tblSTJOHN | None |
| Publication /No Abstract Report | tblSTJOHN | None |
| Topic 1 Report | None | Topic 1 Query |
| Topic 2 Report | None | Topic 2 Query |
| Topic 3 Report | None | Topic 3 Query |
| Topic 4 Report | None | Topic 4 Query |