Reference Manual for Data Base on Nevada Water-Rights Permits

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Reference Manual for Data Base on Nevada Water-Rights Permits

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ABSTRACT

The U.S. Geological Survey and Nevada Division of Water Resources have cooperatively developed and implemented a data-base system for managing water-rights permit information for the State of Nevada. The Water-Rights Permit data base is part of an integrated system of computer data bases using the Ingres Relational Data-Base Management System, which allows efficient storage and access to water information from the State Engineer's office. The data base contains a main table, three ancillary tables, and five lookup tables, as well as a menu-driven system for entering, updating, and reporting on the data. This reference guide outlines the general functions of the system and provides a brief description of data tables and data-entry screens.

INTRODUCTION

The U.S. Geological Survey (USGS) and Nevada Division of Water Resources (NDWR) have developed a system of three integrated data bases for water-rights permit information, water-use information, and well-log data. This report documents one of the three data bases, the water-rights permit data base.

The Water-Rights Permit data-base system manages information including water-rights ownership, point of diversion, place of use, diversion rates, well logs, and manner of use. The State government uses the system for administration of water rights and computation of water use within the State; the USGS uses the water-rights information for water-inventory and water-use studies. The data-base system is written in the Ingres Fourth Generation Language (4GL) with the forms-based user-interface program, Application By Forms (ABF). The user interacts with the application through screen menus consisting of four major components: routines for entering data and updating the data base, for making single-record queries, for compiling and producing reports, and utility routines for managing the data base. Data entry is validated using both forms-based and 4GL-based routines.

The current Ingres version of the Water-Rights Permit data-base system was designed to replace a system previously operated by the State of Nevada on a mainframe computer using the COBOL language. The new system allows the State to reduce operating costs and to have greater control over data quality, data access, and report generation. The new system gives USGS a data base that is more accessible for water-use investigations and for integration with the USGS National Water Information System (NWIS) data base.

The computer hardware used by the State consists of a network of non-graphics and graphics terminals connected to a UNIX-based file server. Because most users have access only to a text-based terminal, the application was developed using text-based 4GL. Coding was completed by USGS staff, working closely with NDWR staff to develop the specifications.

Purpose and Scope

This document serves as a reference guide to the Water-Rights Permit data-base system, developed for the NDWR by the USGS. This guide outlines the general functions of the system and provides a brief description of data tables and data-entry screens. This guide was written assuming that the user is familiar with NDWR's permit process and has been instructed in the use of the data-base system. This guide is not intended for the novice user and does not provide detailed instructions for data input or retrieval. It is not a programming guide and does not describe the system's underlying code.

Many of the concepts and terms used in this report and the data-base application are described in reports and unpublished documents by the Nevada Department of Conservation and Natural Resources. These include Water Words Dictionary (Nevada Division of Water Planning, 1994), Nevada Water Laws (Nevada Division of Water Resources, 1993), Water for Nevada (Nevada State Engineer's Office, 1974), Permit Terms (Nevada State Engineer's Office, written commun., [1995]), and Summary of Statutory Procedure in Making Application for a Water Right and Filing Proofs of Appropriation and Fees Set by Statute (Nevada Division of Water Resources, 1994).

The Water-Rights Permit system has been used successfully for several years by NDWR for the daily management of water-permit information. Although the software has been tested, the USGS and NDWR assume no responsibility for errors or omissions, or for damages resulting from the use of the system.

Acknowledgments

The authors acknowledge several individuals for their contribution to the Water-Rights Permit data-base system. John C. Watson of the U.S. Geological Survey worked on the data-base tables and application. Tracy W. Taylor, P.E., and David J. Modricker, P.E., of the Nevada Division of Water Resources helped with the data specifications.

Conventions

Bold lower case text, such as **main**, is used to identify data-base table names. Bold uppercase text, such as **APP#**, is used to identify data-field names in a table. Nonbold uppercase text in quotes, such as "SOURCE," is used to identify report names and column headings in reports. Nonbold uppercase text in italics, such as *CHANGE BY*, is used to identify remarks in a data-base report.

Computer System Requirements

The Water-Rights Permit data-base system currently operates on a Data General AViiON 5200 file server running a UNIX-based operating system. Ingres Relational Data-Base Management System software is required. The user interface can be executed using either a non-graphics terminal or an X-based terminal. The data-base system was written for the State of Nevada's permitting process and all data ranges and specifications are in accordance with State requirements.

ACCESS LEVELS

The Water-Rights Permit application runs at several access levels. These levels of permission control access to the data, access to application routines, and screen displays. The system access levels are summarized in table 1.

Table 1. System access levels

Access level	User description	Data retrieval	Data update	Data reports	Duty-balance update	Data base optimization
0	Data base administrator	no	no	no	no	yes
1	Data-entry personnel, full rights	yes	yes	yes	yes	no
2	Data-entry personnel, intermediate rights	yes	yes	yes	no	no
3	Data-entry personnel, basic rights	yes	yes	no	no	no
4	Public user	yes	no	no	no	no

Access level zero is intended for the data-base administrator. The administrator can establish or modify information such as user name, access level, and default printer. The data-base administrator also can optimize the data-base tables for maximum system performance, delete records, and update the application status. The Main menu screen displayed for a user with access level zero is shown in figure 1.
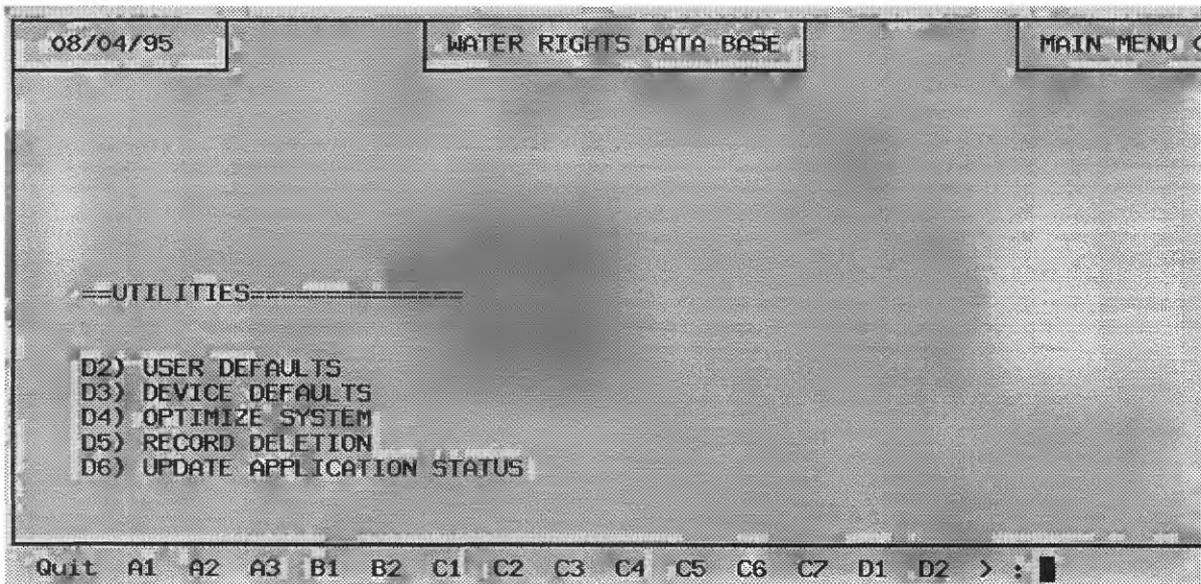
Figure 1. Main menu for user-access level zero (data-base administrator).

Access level one is for data-entry personnel who have full rights and access level two is for data-entry personnel who have intermediate rights. The user with access level one or two can perform data queries, append, and update data and in addition can display and print data reports. The reports include quality-control lists, data summaries, and customized queries. Access level one also allows the user to force changes to the diversion rate-balance field and the duty-balance field. The Main menu screen displayed for a user with access level one is shown in figure 2. The Main menu screen for access level two is shown in figure 3.
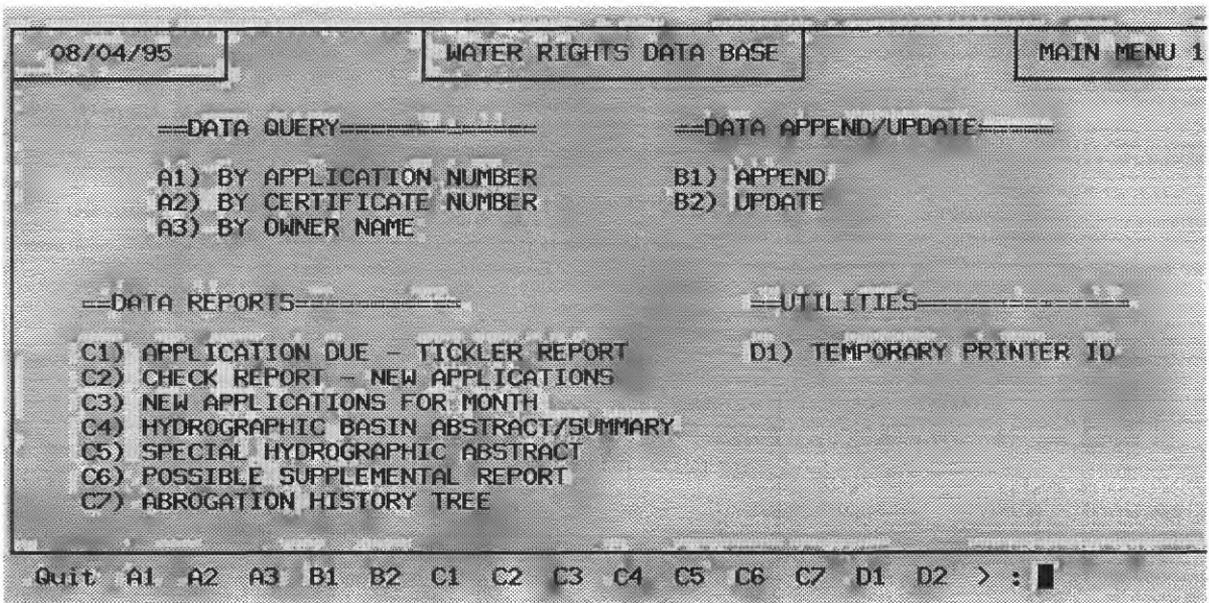
Figure 2. Main menu for user-access level one (data-entry personnel, full rights).
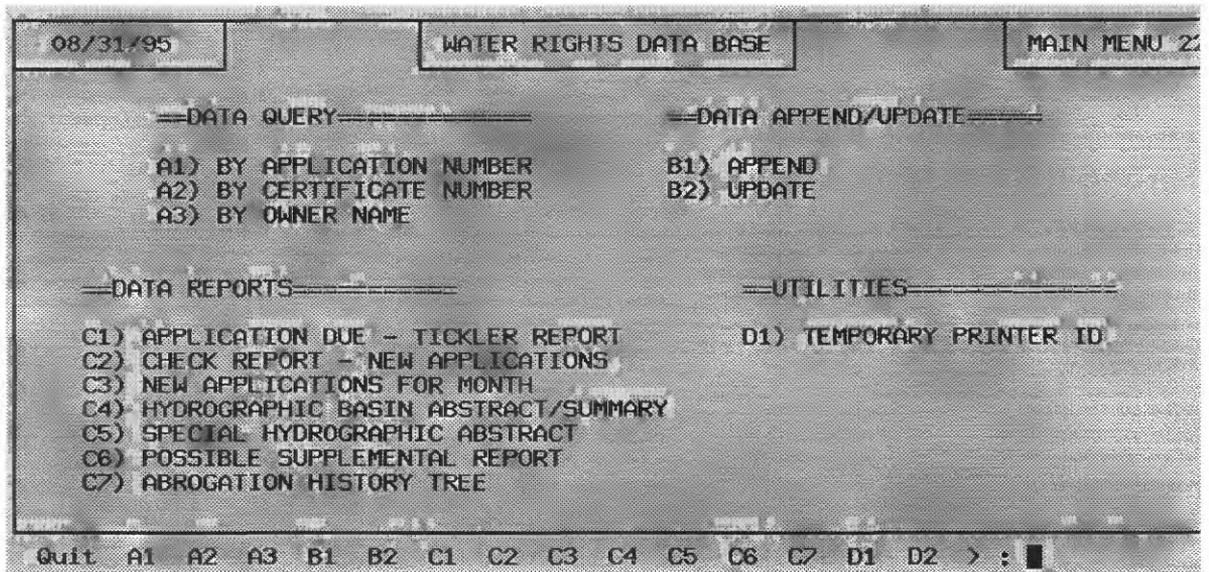
Figure 3. Main menu for user-access level two (data-entry personnel, intermediate rights).

Access level three is for data-entry personnel who have basic rights. The user can perform data queries for specific records, append, and update data. The Main menu screen displayed for a user with access level three is shown in figure 4.

Access level four is for public users and is the most restricted level. The user can make only limited data queries. At this level, public users can search for water-rights permits by several criteria, including application number and owner's name, but are not allowed to modify the data base, view confidential information, or generate reports. The Main menu screen displayed for a user with access level four is shown in figure 5.
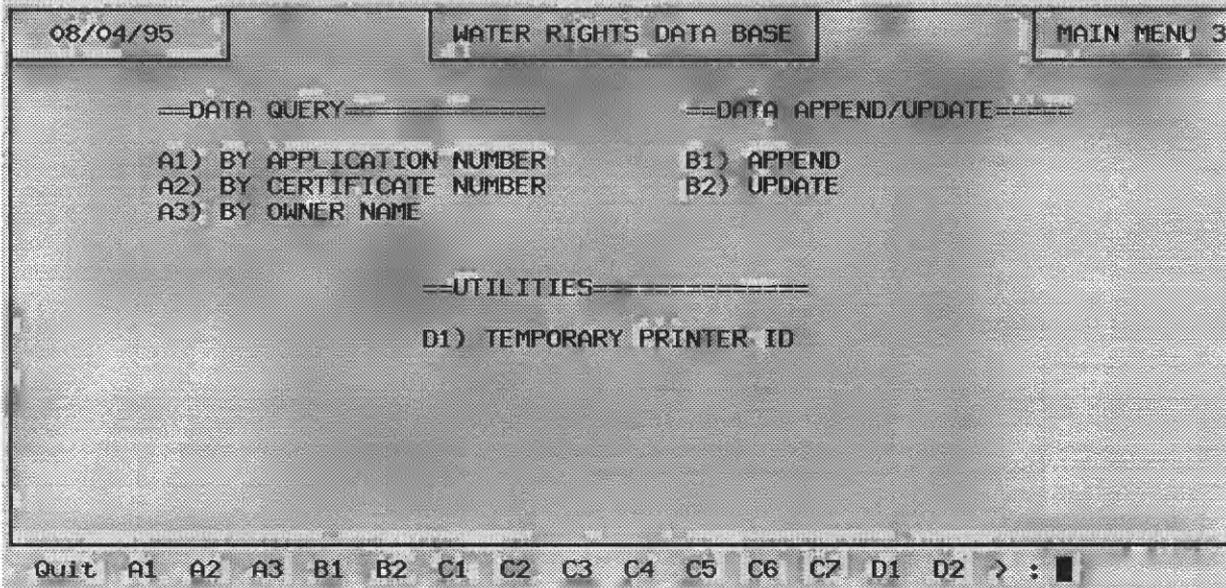
Figure 4. Main menu for user-access level three (data-entry personnel, basic rights).
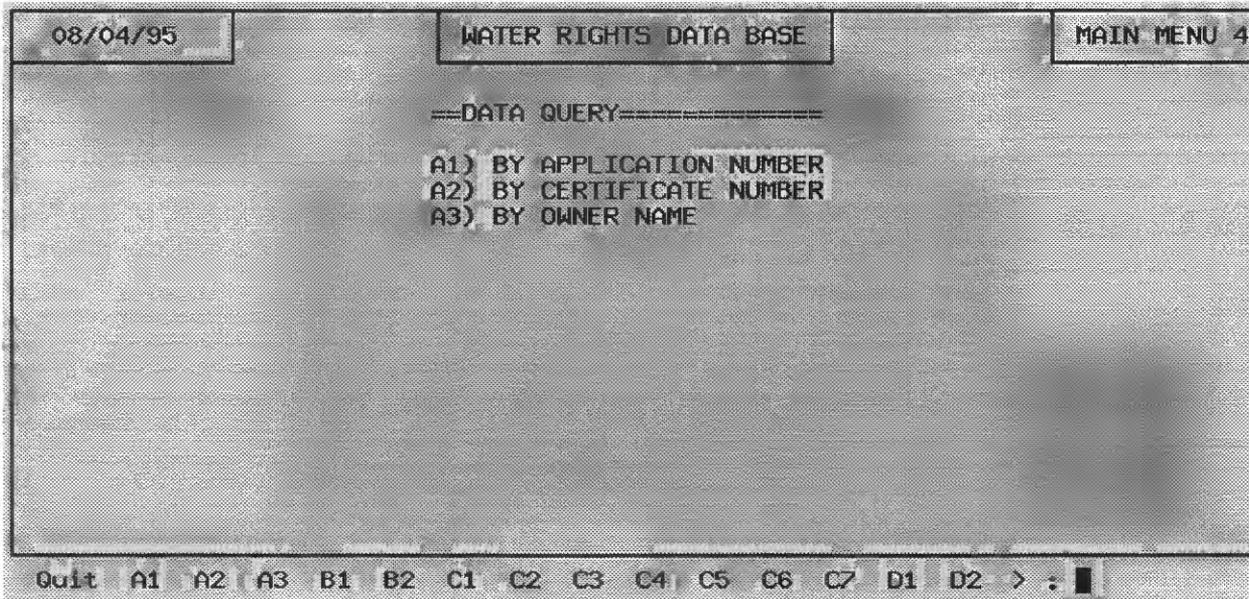
Figure 5. Main menu for user-access level four (public user).

STRUCTURE OF DATA BASE

The Ingres data base for the Water-Rights Permit system consists of a main table, three ancillary tables, five lookup tables, and three system-maintenance tables. The main table (**main**) stores most of the water-rights information. The ancillary tables (**owner, pou,** and **supplement**) contain information about water-rights ownership, place of use, and supplemental sources of water. The ancillary tables are joined to the **main** table through one-to-many relations. The lookup tables (**basin_lut, county_lut, source_lut, status_lut,** and **use_lut**) give the user a list of valid parameters for particular fields and provide the fully expanded name for abbreviations used in the main and ancillary tables. The system-maintenance tables (**defaults_device, defaults_user,** and **error_messages**) store user and printer information and system error messages. The relation between the tables in the permit data base is shown in figure 6.

Nevada Water-Rights Permit Data Base
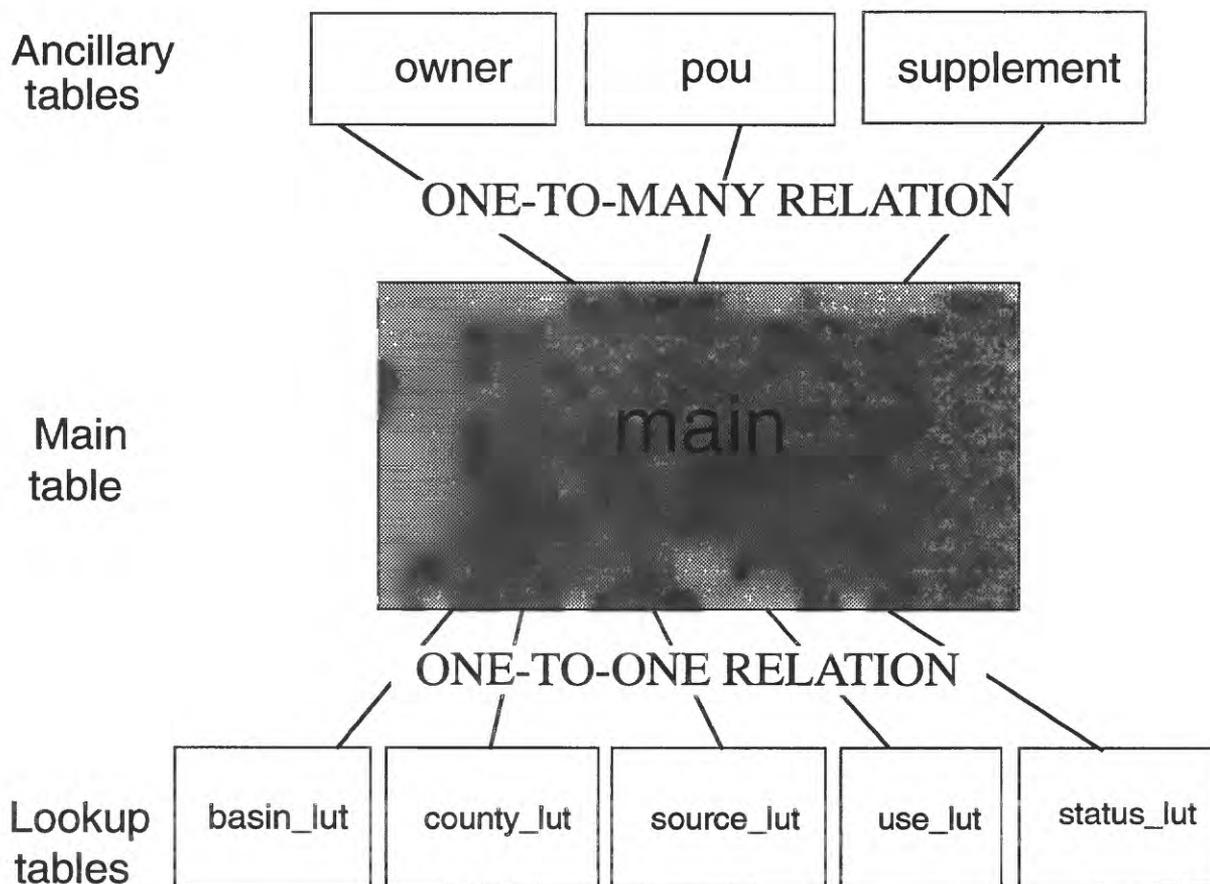
Figure 6. Relations between tables of the permit data base.

The fields in the **main** table are listed and described in table 2. The fields in the **owner, pou,** and **supplement** tables are listed and described in tables 3, 4, and 5. A technical description of each field in **main,** including entry type, width, and template limits is in table 6. A technical description of each field in the ancillary tables, including entry type and width limits, is in tables 7, 8, and 9. A technical description of each field in the lookup tables, including entry type and width limits, is in table 10. County codes and county names are in table 11. Application status codes and descriptions are in table 12. Source codes and descriptions are in table 13. Use codes and descriptions are in table 14. Tables 6-14 are in the appendix.

Table 2. General description of data fields for main (**main**) table

[Abbreviations: NDWR, Nevada Division of Water Resources; POD, point of diversion; POU, place of use; MOU, manner of use; PLSS, Public Land Survey System; USGS, U.S. Geological Survey]

Field name	Description	Additional Information
APP#	Application number	Request for water use (other than domestic or change of an existing use); number is assigned by NDWR at time of filing. After all legal requirements have been satisfied, application may be permitted and subsequently certified.
CERT#	Certificate number	Assigned by engineering staff at NDWR after permit terms are satisfied.
APP_STATUS	Application status	Current status within NDWR approval process. See table 12.
BASIN	Basin code	Based on hydrographic numbering system. See Rush, 1968.
COUNTY	County code	Nevada county code for point of diversion (**POD**). See table 11.
PREV_APP#	Previous application number	If current application changes a previous application, then entry is for previous application.
APP_CHANGE	Application change	Manner in which the previous application (**PREV_APP#**) is being changed. Changes are for any combination of POD, POU, MOU.
SOURCE	Water source	Various ground- and surface-water sources. See table 13.
SOURCE_DESC	Water source description	Name of well or surface source.
USE	Water use	Manner of use. See table 14.
PERIOD_START	Period of use, starting date	
PERIOD_END	Period of use, ending date	
POD_QQ	Point of diversion, quarter-quarter section	Location within PLSS quarter-quarter section (40-acre subdivision).
POD_Q	Point of diversion, quarter section	Location within PLSS quarter section (160-acre subdivision).
POD_SEC	Point of diversion, section	Location within PLSS section.
POD_TWN	Point of diversion, township	Location within PLSS township.
POD_RNG	Point of diversion, range	Location within PLSS range.
POD_REF	Point of diversion, reference code	PLSS reference point. Valid codes are: MD, Mount Diablo; SLC, Salt Lake City; SB, San Bernardino; W, Willamette; and GSR, Gila and Salt River.
DUTY	Duty	Amount of water applied for, in units, specified by duty units (**DUTY_UNITS**).
DUTY_BALANCE	Duty balance	Duty minus sum of duty entries for permitted change applications.
DUTY_UNIT	Duty units code	Valid codes: AFA, acre-feet/annum; AFS, acre-feet/season; MGA, million gallons/annum; MGS, million gallons/season.
DIV_RATE	Diversion rate	Value stored in cubic feet per second.
DIV_BALANCE	Diversion balance	Diversion rate (**DIV_RATE**) minus sum of diversion entries for change applications.
POU_ACRE_TOTAL	Sum of acreage	Acreage sums for place of use.
ACFT_STOR	Storage rate	Value is annual or seasonal storage in acre-feet, for applications claiming storage as point of diversion.
WELL_LOG1	Well log number 1	Number assigned by USGS. Well can have multiple logs.
WELL_LOG2	Well log number 2	Do.
WELL_LOG3	Well log number 3	Do.

Table 2. General descriptions of data fields for main (**main**) table--Continued

Field name	Description	Additional Information
FILE_DT	Filing date	Date application was filed with NDWR.
PRIOR_DT	Priority date	Same as filing date unless application is change application, or permit is cancelled and then cancellation subsequently rescinded. Priority date equals filing date of previous application if change application.
RTN_DT	Return date	Date that application is returned to NDWR after correction by applicant.
MAP_DT	Map date	Date that application's supporting map was filed with NDWR.
MAP#	Map number	Application number stamped on supporting map filed with NDWR.
PUB_DT	Publication date	Date application is sent out for newspaper public notice publication by NDWR.
PUB_END_DT	Ending publication date	Last date of publication, 4 weeks after publication date (**PUB_DT**).
PROTEST	Protest	Whether an application was protested. Application may be protested within 30 days after publication ending date (**PUB_END_DT**).
FIELD_INV	Field investigation	Whether a field investigation has been completed by NDWR.
DECREE_NAME	Decree name	Adjudicated stream name for vested rights.
RFA_DT	Ready for action date	Date when NDWR will take action on an application, 30 days after publication ending date (**PUB_END_DT**).
WDR_DT	Withdrawn date	Date application was withdrawn by applicant.
PER_DT	Permit date	Date application was permitted by NDWR.
CAN_DT	Cancellation date	Date permit was cancelled by NDWR.
CAN_PORTION	Cancellation of a portion of permit	A portion, as well as the entire permit, may be cancelled by NDWR due to noncompliance.
RUL_DT	Ruling date	Date that NDWR ruled on application or permit.
RUL_STATUS	Ruling status	Approved or denied status ruled by NDWR.
RUL#	Ruling number	Ruling prepared by NDWR is assigned a number.
RUL_RSN	Ruling reason	Brief description of NDWR final ruling.
POC_EXT	Proof of completion, extension of time	Whether the applicant has applied for an extension of time for filing proof of beneficial use.
POC_DUE_DT	Proof of completion, due date	Date the works of diversion must be completed, as specified in permit terms.
POC_RCD_DT	Proof of completion, received date	Date that proof of completion was filed with NDWR.
PBU_EXT	Proof of beneficial use, extension of time	Whether the applicant applied for an extension of time with NDWR for filing proof of beneficial use.
PBU_DUE_DT	Proof of beneficial use, due date	Final proof of beneficial use required by terms of permit.
PBU_RCD_DT	Proof of beneficial use, received date	Date that proof of beneficial use was received by NDWR.
PBU_MAP_DUE	Proof of beneficial use, map due	Whether a map is required for beneficial use filing by NDWR.
PBU_MAP#	Proof of beneficial use, map number	Application number stamped on the supporting map filed with NDWR.
PBU_MAP_RCD_DT	Proof of beneficial use, map received date	Date supporting map was filed with NDWR.
CER_DT	Certificate date	Date application was certificated by NDWR.

Table 2. General descriptions of data fields for main (**main**) table--Continued

Field name	Description	Additional Information
EXP_DT	Expiration date	Date temporary or environmental application permit expires; usually 1 year after issuance.
OTHER_DT	Other date	Reserved for dates associated with rulings for other than approvals or denials as described by date remark (**DATE_REMARK**).
DATE_REMARK	Date remark	Remarks for date changes or other unique situations.
USE_UNITS	Use units	Brief description of number of units served, such as live-stock or subdivision lot count.
REMARK	Remarks	Pertinent remarks about application.
REP	Reporting requirement	Frequency that applicant must report well pumpage data to NDWR prior to certification. Valid options are Monthly, Quarterly, Annually.
SUP_ACRES	Supplemental Acres	Acreage supplemental to ground-water permit.
SUP_ACRE_FT	Supplemental Acre-foot	Duty associated with supplemental-acres (**SUP_ACRES**).
SUP_SRC	Supplemental source	Source of supplemental acres.
SUB_BASIN	Sub-basin code	Internal NDWR code that further subdivides basin code (**BASIN**).
SUP_ADJ	Supplemental adjustment	Optional duty adjustment to ground-water permit.

Table 3. General description of data fields for owner (**owner**) table

Field name	Description	Additional information
APP#	Application number	Request for water use (other than domestic or change of an existing use); number is assigned by NDWR at time of filing. After all legal requirements have been satisfied, application may be permitted and subsequently certified.
OWNER_NAME	Owner name	Application may have multiple owners.
OWNER_TYPE	Owner type	Whether the specified owner is the original owner, current owner, or both
OWNER_PCT	Percent of ownership	Percent of permit owned by specified owner
OWNER_DUTY	Duty	Portion of duty owned by specified owner
OWNER_DIV_RATE	Diversion rate	Portion of diversion rate owned by specified owner

Table 4. General descriptions of data fields for place of use (**pou**) table

Field name	Description	Additional information
APP#	Application number	Request for water use (other than domestic or change of an existing use); number is assigned by NDWR at time of filing. After all legal requirements have been satisfied, application may be permitted and subsequently certified.
POU_QQ	Place of use, quarter-quarter section	Location within PLSS quarter-quarter section (40- acre subdivision)
POU_Q	Place of use, quarter section	Location within PLSS quarter section (160-acre subdivision)
POU_SEC	Place of use, section	Location within PLSS section
POU_TWN	Place of use, township	Location within PLSS township
POU_RNG	Place of use, range	Location within PLSS range
POU_REF	Place of use, reference	PLSS refernce point. Valid codes: MD, Mount Diablo; SLC, Salt Lake City; SB, San Bernardino; W, Willamette; GSR, Gila and Salt River
POU_ACRE	Place of use, acres	Number of acres within place of use

Table 5. General descriptions of data fields for supplemental (**supplement**) table

Field name	Description	Additional Information
APP#	Application number	Request for water use (other than domestic or change of an existing use); number is assigned by NDWR at time of filing. After all legal requirements have been satisfied, application may be permitted and subsequently certified.
SUP_APP#	Supplemental application number	Application(s) supplemental to current application. Supplemental applications are identified by NDWR at issuance of permit.
SUP_AMT	Supplemental duty amount	Adjustment value that assures total supplemental duties equal duty allowed under condition of permits. Adjustment value is manually entered by users with access level 1.

Reports

Users with access levels one and two may invoke several reports for retrieving and organizing the water-permit data. The reports can identify adjacent and potentially conflicting water-rights applications and summarize water-right information. Seven reports currently are available: (1) "APPLICATION DUE - TICKLER REPORT" notifies managers of pending legal dates, on the basis of the application status; (2) "CHECK REPORT" summarizes the previous day's, or range of day's activity; (3) "NEW APPLICATIONS FOR MONTH" summarizes the previous month's activities; (4) "HYDROGRAPHIC BASIN ABSTRACT" summarizes ground-water information by hydrographic basin; (5) "SPECIAL HYDROGRAPHIC ABSTRACT" summarizes ground-water information for any user-specified combination of source, status, and several other fields; (6) "POSSIBLE SUPPLEMENTAL REPORT" notifies managers of potentially conflicting claims; and (7) "ABROGATION HISTORY TREE REPORT" lists the abrogation history for a specified report. Reports can be viewed on the screen or sent to a printer.

Interface Screens

The user, depending upon access level, performs data queries, appends, and updates through a series of interface screens. The main menu for each access level displays the set of menu options available to the user (see figs. 1-5).

Data-Query Menu Options

A data query retrieves water-permit data without updating the data. A query can be made by using three menu options:

Option A1 - Retrieve by application number (**APP#**). Option A1 retrieves water-rights data by the water-rights application number. When query by application number (A1) is selected from the main menu, a small pop-up menu prompts the user for an application number. After the user has entered the desired application number and moved out of the application number entry field, the screen clears and the first page of permit information appears on the screen.

Option A2 - Retrieve by certificate number (**CERT#**). Option A2 retrieves water rights data by the certificate number and displays the same information as described for Option A1. When query by certificate number (A2) is selected, the user is prompted for a certificate number.

Option A3 - Retrieve by owner name (**OWNER_NAME**). Option A3 first retrieves all owner names that match a specified name and then retrieves the same information as described for Option A1. When query by owner name (A3) is selected, the user is prompted for an owner name and search method, either binary or sequential. Binary

search allows fast retrieval but does not permit internal matches (searching for a string within a character string). Sequential search is much slower but allows internal matches. A list of owner names matching a user-specified name is written to the screen, along with associated data fields (owner status; application number; application status; source; point of diversion information using locations based on the township, range, section, quarter, quarter-quarter of the public land survey system (PLSS); basin; and use). The user is prompted to select one application record from the list.

Data-Append Menu Option

Data append is used to add new records to the data base. Data append uses the following option:

Option B1 - Append new information to the data base. Option B1 allows the user to input a new water-rights application and begin data entry.

Data-Update Menu Option

Data update is used to correct or update an existing record. Data can be updated using the following option:

Option B2 - Update previously entered information for an application. Option B2 allows the user to retrieve a water-rights record and then update the information.

Data-Report Menu Options

The data, retrieved by either the Query, Append, or Update option, are displayed on a series of five screen pages. These screens are shown in figures 7-11. The interface screens guide the user through the data available for a specific application number. A description of each field associated with the application is in table 2. Reports are accessed by the following menu options:

Option C1 - "APPLICATION(S) DUE-TICKLER REPORT." The "APPLICATION(S) DUE-TICKLER REPORT" column headings are shown in figure 12. The report has the following characteristics:

- Report is generated the first workday of each week.

- Records are sorted by due date then by application number (**APP#**).

- Report includes all current owners for a given application number.

- Report prints '*** *NO FILES DUE FOR THIS PERIOD* ***' if no matches are found for a given application status (**APP_STATUS**)

- Report includes four sections, one for each of the following date fields:

  RFA - Ready for Action (**RFA_DT** field)
  RFC - Return for Corrections due (**RTN_DT** field)
  POC - Proof of Completion due (**POC_DUE_DT** field)
  PBU - Proof of Beneficial Use due (**PBU_DUE_DT** field)

- Records are included in report if period of 60 days after return date (**RTN_DT**+ 60 days) matches any day in the current week (Monday through Sunday) for the RFC section.

Option C2 - "CHECK REPORT - NEW APPLICATIONS." The "CHECK REPORT - NEW APPLICATIONS" column headings are shown in figure 13. The report has the following characteristics:

- Report is generated for a specified filing-date range (**FILE_DT**).
- Records are sorted by application number (**APP#**).
- Records are included in the report if a modification was made since the last report.
- Report gives the option of listing either the first or all current owners.
- "CHG" column indicates whether application is a Change Application, (changes an earlier application).
- Report prints source name if water source is ground water (**SOURCE** equals UG, GEO, or OGW); otherwise source description prints in the "SOURCE" column.
- Records for secondary applications are printed as a group at the end of report.

Option C3 - "MONTHLY WATER LOG REPORT." The "MONTHLY WATER LOG REPORT" column headings are shown in figure 14. The report has the following characteristics:

- Report is generated for a user-specified month.
- Records are sorted by application number (**APP#**).
- Records are included in the report if a modification was made during the specified month.
- Report gives the option of listing either the first or all current owners.
- "DATE" column lists the application filing date field (**FILE_DT**).
- "CHG" column indicates whether application is a Change Application (changes an earlier application).
- Report prints source name if water source is ground-water (**SOURCE** equals UG, GEO, or OGW); otherwise source description prints in the "SOURCE" column.
- Records for secondary applications are printed as a group at the end of report.

Option C4 - "HYDROGRAPHIC BASIN ABSTRACT/SUMMARY." The "HYDROGRAPHIC BASIN ABSTRACT/SUMMARY" column headings are shown in figure15. The report contains the following three sections by hydrographic basin.

1. Hydrographic Basin Abstract—Lists information on ground-water sources for any status (**APP_STATUS**). Output records are sorted by application number (**APP#**) in ascending order.
2. Hydrographic Basin Groundwater by status for active ground-water sources— Summarizes supplementally adjusted annual duty for ground-water sources (**SOURCE** equals UG, GEO, or OGW) by status (**APP_STATUS**).
3. Hydrographic Basin Summary by manner of use for ground-water sources— Summarizes active and pending annual duties by manner of use (**USE**). Report includes supplementally adjusted duties and duties associated with applications to change.

The report has the following characteristics:

- Report is generated for a user-specified basin number (**BASIN**).

- Records are sorted by application number (**APP#**), then change of application number (**PREV_APP#**).

- Records are included in the report for ground-water sources (**SOURCE** equals UG, GEO, or OGW) and active status (**APP_STATUS** equals APP, RFA, RFP, PER, CER, DEC, RVK, VST, RES, or RLP).

- "CHANGE OF APP# "column indicates previous applications and all abrogating applications. Abrogating applications are flagged with *CHANGE BY*.

- "SUP" column indicates whether application has a supplemental application.

Option C5 - "SPECIAL HYDROGRAPHIC ABSTRACT." The "SPECIAL HYDROGRAPHIC ABSTRACT" allows the user to specify one or more data criteria by which to retrieve information. The input screen for entering user-specified criteria is shown in figure 16. The column headings from the resulting reports are shown in figure 17. The reports have the following characteristics:

- Report is generated from user-specified criteria for any combination of basin (**BASIN**), township (**POD-TWN**), range (**POD_RNG**), section (**POD_SEC**), application status (**APP_STATUS**), source (**SOURCE**), use (**USE**), owner (**OWNER_NAME**), and start and end filing date (**FILE_DT**).

- Records are sorted by application number (**APP#**), then change of application number (**PREV_APP#**).

- "CHANGE OF APP#" column indicates previous applications (**PREV_APP#**) and abrogating applications (**APP_CHANGE**). Abrogating applications are flagged with *CHANGE BY*.

- "SUP" column indicates whether application has a supplemental application.

Option C6 - "POSSIBLE SUPPLEMENTAL REPORT." The "POSSIBLE SUPPLEMENTAL REPORT" column headings are shown in figure 18. The report has the following characteristics:

- Report is generated for a user-specified basin number (**BASIN**).

- Records are included in report for ground-water sources (**SOURCE** equals UG, GEO, or OGW) and active status (**APP_STATUS** equals PER, CER,VST, or DEC).

- Records are sorted and grouped by place of use (**POU**) field. Within **POU** fields, records are sorted by application number (**APP#**).

Option C7 - "ABROGATION HISTORY TREE." Abrogation history tree shows the sequence of abrogations for a user-specified permit number using a tree diagram. The tree diagram shows historical changes leading up to a user-specified permit number. The column headings from the report are shown in figure 19.

```
DATE: 08/04/95──────────────WATER RIGHTS DATA BASE───────────── APPEND-PAGE 1──
        APP. NO.: _ - _____ -____   APP. STATUS: ____   CERT. NO.: _____

OWNR:                                    STATUS:
BASIN: ___   BASIN NAME: _____
BASIN STATUS: _____          REGION: _____
COUNTY: ___   COUNTY NAME: _____
┌──────────────────────────────────────────────────────────────────────────┐
│  CHANGE OF APP. NO.: _____  FOR  POD: _   POU: _   MOU: _            │
│  ABROGATION: ____      SUPPLEMENTAL: ____                                   │
└──────────────────────────────────────────────────────────────────────────┘
SOURCE: ____                 SOURCE DESCRIPTION: _____
USE: ____                    PERIOD START: __/__      PERIOD END: __/__
┌──────────────────────────────────────────────────────────────────────────┐
│  Point of Diversion Information -                                          │
│   QTR-QTR: __   QTR: __   SEC: ___   TWN: ____   RNG: ____   REFERENCE: ___ BM│
└──────────────────────────────────────────────────────────────────────────┘
DUTY: _____   UNIT: ___   DUTY BALANCE: _____    DTY_FLG
DIV.: _____   UNIT: ___   DIV. BALANCE: _____    DIV_FLG
ACRES IRRIGATED: _____         ACRE-FEET STORAGE: _____
WELL LOGS: _____ . _____ . _____

   Enter  Save  Dup/save  Clear  Main  2-Pg  3-Pg  4-Pg  5-Pg  > : █
```

Figure 7. Page one for append mode. Screen is similar when in update or query mode.

```
DATE: 08/04/95──────────────WATER RIGHTS DATA BASE───────────── APPEND-PAGE 2──
        APP. NO.: _ -ZZZZZ- ____   APP. STATUS: ____   CERT. NO.: _____

   FILING DATE: _____           PRIORITY DATE: _____
   RETURN DATE: _____           MAP FILED DATE: _____
                                   UNDER APP. NO.: _____
   SENT FOR PUB. DATE: _____      LAST PUB. DATE: _____
   PROTESTED: __  FIELD INVEST. PENDING: ___  DECREE SOURCE: _____
┌──────────────────────────────────────────────────────────────────────────┐
│   READY FOR ACTION DATE: _____        WITHDRAWN DATE: _____           │
│   PERMIT DATE: _____   CAN_PORTION: _  CANCELATION DATE: _____        │
└──────────────────────────────────────────────────────────────────────────┘
   RULING DATE: _____            RULING STATUS: _____
   RULING NUMBER: _____            RULING REASON: _____
┌──────────────────────────────────────────────────────────────────────────┐
│   PROOF OF COMPLETION DUE DATE: _____  _   RECEIVED: _____            │
│   PROOF OF BENEFICIAL USE DUE DATE: _____  _   RECEIVED: _____        │
│   CULTURAL MAP DUE: _                                                       │
│   FILED UNDER APP. NO.: _____              RECEIVED: _____            │
└──────────────────────────────────────────────────────────────────────────┘
     CERT DATE: _____              EXPIRATION DATE: _____
     OTHER DATE: _____      REPORTING REQUIREMENT (M,Q,A): _____
DATE REMARKS: ____
   Enter  1-Pg  3-Pg  4-Pg  5-Pg  Prnt_scrn  Help  : █
```

Figure 8. Page two for append mode. Screen is similar when in update or query modes.

Figure 9. Page three for append mode. Screen is similar when in update or query modes.

Figure 10. Page four for append mode. Screen is similar when in update or query modes.

Figure 11. Page five for append mode. Screen is similar when in update or query modes.

NEVADA DIVISION OF WATER RESOURCES
WATER RIGHTS DATABASE
PAGE: 1
RUN DATE: 05/26/95

TICKLER REPORT

FOR STATUS: RFA - Ready for Action
FROM 05/22/1995 THROUGH 05/28/1995

APP. NO.	OWNER NAME	BASIN	DATE DUE
60730	BEAU RIVAGE, C/O MIRAGE RESORTS INC.	212	05/22/1995
60731	BEAU RIVAGE, C/O MIRAGE RESORTS INC.	212	05/22/1995
60732	BEAU RIVAGE, C/O MIRAGE RESORTS INC.	212	05/22/1995
60733	BEAU RIVAGE, C/O MIRAGE RESORTS INC.	212	05/22/1995
60734	BEAU RIVAGE, C/O MIRAGE RESORTS INC.	212	05/22/1995

Figure 12. Column headings for report C1, Applications Due-Tickler Report.

NEVADA DIVISION OF WATER RESOURCES
WATER RIGHTS DATABASE
PAGE: 1
RUN DATE: 05/26/95

CHECK REPORT - NEW APPLICATIONS FOR 01-MAY-1995 TO 25-MAY-1995

APP#	DATE	CHG	BSN	CO	OWNER NAME	SOURCE	DIV. RATE	USE	SEC	TWN	RNG
12156R01	05/04/1995	Y	107	LY	STATE OF NEVADA	UNDERGROUND	0.090	DOMESTIC	15	11N	24E
61190	05/01/1995	Y	088	WA	MONTREUX, A JOINT VENTURE	GALENA CREEK	0.500	RECREATIONAL	03	17N	19E
61191	05/01/1995	Y	088	WA	MONTREUX, A JOINT VENTURE	GALENA CREEK	1.290	RECREATIONAL	03	17N	19E
61192	05/01/1995	Y	212	CL	LA PIERRE FAMILY TRUST	UNDERGROUND		DOMESTIC	35	20S	62E
61193	05/01/1995	Y	054	LA	CORTEZ JOINT VENTURE	UNDERGROUND	0.008	STOCKWATERING	06	27N	47E

Figure 13. Column headings for report C2, Check Report-New Applications.

NEVADA DIVISION OF WATER RESOURCES
WATER RIGHTS DATABASE
PAGE: 1
RUN DATE: 05/26/95

CHECK REPORT - NEW APPLICATIONS FOR 01-APR-1995 TO 30-APR-1995

APP#	DATE	CHG	BSN	CO	OWNER NAME	SOURCE	DIV. RATE	USE	SEC	TWN	RNG
35605R01	04/18/1995	Y	105	DO	DOUGLAS COUNTY	UNDERGROUND		DOMESTIC	35	13N	20E
61689	04/04/1995	Y	028	HU	DELONG RANCHES, INC.	UNDERGROUND	0.066	STOCKWATERING	02	35N	29E
61090T	04/04/1995	Y	101	CH	FALLON PAIUTE SHOSHONE TRIBE	TRUCKEE & CARSON RIVERS		AS DECREED	33	19N	26E
61091	04/05/1995	Y	162	NY	KITZMAN, ALICE M.	UNDERGROUND	0.009	QUASI-MUNICIPA	33	19S	53E
61092	04/05/1995	Y	212	CL	LA PIERRE, JANE	UNDERGROUND		DOMESTIC	35	20S	62E

Figure 14. Column headings for report C3, Monthly Water Log Report.

NEVADA DIVISION OF WATER RESOURCES
WATER RIGHTS DATABASE

HYDROGRAPHIC BASIN ABSTRACT
GROUND WATER

HYDROGRAPHIC REGION: 10 CENTRAL

HYDROGRAPHIC BASIN: 142   ALKALI SPRING VALLEY (ESMERALDA)

APP#	CHANGE OF APP#	CERT#	FILING-DATE	STAT	SRC	QQ	POINT OF DIVERSION QTR SEC	TWP	RNG	DIV RATE (CFS)	TYPE OF USE	S OF U P USE	ACRES IRRIGATED	ANNUAL DUTY	CO	OWNER OF RECORD
316		532X	12/17/1906	CER	UG	N2	NE 16	015	41E	10.000	MM		0.00	2,359.06 MGA	ES	HARPER, ROBERT L.
12607		3873	09/02/1948	CER	OGW	NW	SE 23	025	42E	0.078	MM		0.00	18.40 MGA	ES	DAVIS, RALPH E.
30073			03/11/1976	ABR -PER	UG	SE	NE 20	025	43E	0.000	IRR		0.00	0.00 AFA	ES	RIDGEWAY, JACK C.
CHANGE BY: 445588																
36697			02/12/1979	ABR	UG	NE	NE 10	015	42E	0.000	QM		0.00	0.00 =	ES	ESMERALDA COUNTY

Figure 15. Column headings for report C4, Hydrographic Basin Abstract/Summary.

NDWR — WATER RIGHTS DATABASE
SPECIAL HYDROGRAPHIC ABSTRACT

```
Basin         IN   _____        multi-char(4)

Township      IN   _____        multi-char(4)
Range         IN   _____        multi-char(4)
Section       IN   _____        multi-char(2)

App. Status   IN   _____        multi-char(3)
Source        IN   _____        multi-char(3)
Use           IN   _____        multi-char(3)

Owner         LIKE _____        single-char(36)

Start file date: _____        End file date: _____
```

NOTE: Each element in character strings must be enclosed in single quotes.
      Individual elements must be separated by a comma. Ex. '089', '091'
WILDCARDS: _ = one character, % = mutiple characters.
ABBREVIATION: Use the word ACTIVE in quotes to indicate all active status.
      ACTIVE = APP,CER,PER,RES,RFA,RFP,RLP,RVP,VST,DEC.

Enter Go Main : ■

Figure 16. Data input screen for report C5, Special Hydrographic Basin

NEVADA DIVISION OF WATER RESOURCES
WATER RIGHTS DATABASE

SPECIAL HYDROGRAPHIC ABSTRACT

Selection Criteria: BASIN IN (033A)

APP#	CHANGE OF APP#	CERT#	FILING DATE	STAT	SRC	POINT OF DIVERSION QTR QQ SEC TWP RNG	DIV RATE (CFS)	TYPE OF USE	S U P	ACRES IRRIGATED	ANNUAL DUTY	CO	OWNER OF RECORD
***** START OF SECTION FOR BASIN NUMBER: 033A *****
1018			06/18/1908	CAN	SPR	44N 37E	0.000	MM		0.00	0.00	HU	MANITOU MINING
1135			09/30/1908	CAN	SPR	43N 37E	0.000	MM		0.00	0.00	HU	IRON KING MINING MILLING AND DEV CO
1534			11/22/1909	CAN	STR	30 41N 38E	0.000	IRR		0.00	0.00	HU	HARDIN, AMOS R.
1577			01/13/1910	CAN	STR	29 42N 37E	0.000	IRR		0.00	0.00	HU	BARTMAS, FREDERICK
1594			01/29/1910	CAN	STR	SW 24 42N 37E	0.000	IRR		0.00	0.00	HU	HUMBOLDT CATTLE CO

Figure 17. Column headings for report C5, Special Hydrographic Basin.

NEVADA DIVISION OF WATER RESOURCES
WATER RIGHTS DATABASE

POSSIBLE SUPPLEMENTAL REPORT
FOR ACTIVE APPLICATIONS IN BASIN NUMBER: 001
FOR SOURCE:

APP#	CHANGED APP#	PLACE OF USE SEC TWN RNG	MANNER OF USE	STATUS	SOURCE
>>>>> Permits which cover less than an entire township:
24466	23151	15 47N 30E	IRRIGATION	CER	UG
27292	24464	15 47N 30E	IRRIGATION	CER	UG
27293	24467	15 47N 30E	IRRIGATION	CER	UG
28051		15 47N 30E	IRRIGATION	CER	UG
*****
24466	23151	15 47N 30E	IRRIGATION	CER	UG
27292	24464	15 47N 30E	IRRIGATION	CER	UG
28051		15 47N 30E	IRRIGATION	CER	UG

Figure 18. Column headings for report C6, Possible Supplemental Report.

```
                    NEVADA DIVISION OF WATER RESOURCES                    PAGE:    1
                         WATER RIGHTS DATABASE                      RUN DATE: 09/18/95

           ABROGATION HISTORY TREE WITH APPLICATION STATUS AND FILING DATE
                         FOR APPLICATION:  30111

   Level 1        Level 2       Level 3       Level 4       Level 5       Level 6       Level 7

   50485
WDR-1/9/1987
     I
   52903
RFA-2/2/1989
     I
   55596T
WDR-1/2/1991
     I
   57088
CER-1/15/1992
     I
   57090
CER-1/15/1992
```

Figure 19. Column headings for report C7, Abrogation History Tree.

REFERENCES CITED

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——1994, Summary of statutory procedure in making application for a water right and filing proofs of appropriation and fees set by statute: Nevada Department of Conservation and Natural Resources, 15 p.

Nevada State Engineer's Office, 1974, Water for Nevada—Water planning report: Nevada Department of Conservation and Natural Resources, 60 p.

Rush, F.E., 1968, Index of hydrographic areas in Nevada: Nevada Division of Water Resources, Information Report 6, 38 p.

APPENDIX

Table 6. Field description for the main (main) data-base table

[Abbreviations: #, numeric column of 0 to 9; a, alphanumeric column of A to Z or 0 to 9; a...., repeat of alpha character up to width of field; c, character column of A to Z or blank or space as specified by template limits; mmdd, date in month/day format; mmddyy, date in month/day/year format]

Field name	Data type	Entry width	Entry template	Template limits	Required field	Entry page number
APP#	char	10	b#####aa##	b = V,R,J,0 to 9	yes	1
CERT#	char	6	#####a	If application status (APP_STATUS) is equal to certificate (value equals CER), then certificate number (CER#) must be completed. If application status is not equal to CER, then certificate number can be blank.	no	1
APP_STATUS	char	3	ccc	See table 12 for list of statuses.	yes	1
BASIN	char	4	###c	# = 1-232 c= A to D See Rush, 1968.	yes	1
COUNTY	char	2	cc	If county (COUNTY) is equal to Clark (CL), then the point of diversion township (POD_TWN) and the place of use township (POU_TWN) direction is south. If county is equal to Nye (NY), Esmeralda (ES), or Lincoln (LI), then POD_TWN and POU_TWN direction is north (N), 'S', or blank. If county is not equal to 'CL', 'NY', 'ES', or 'LI', then POD_TWN and POU_TWN direction is equal to 'N'. See table 11 for list of counties.	yes	1
PREV_APP#	char	10	aaaaaaaaaa	Existing application number (APP#) or decree number. The previous application number (PREV_APP#) must be an existing application number or decree.	no	1
APP_CHANGE	char	3	ccc	"Y" or blank. Character position corresponds to change status for point of diversion, (POD), place of use (POU), or manner of use (MOU), respectively. System will not accept entry if previous application (PREV_APP#) is not in data base.	no	1
SOURCE	char	3	ccc	See table 13 for list of source names.	yes	1
SOURCE_DESC	varchar	23	a...		no	1
USE	char	3	ccc	See table 14 for list of use names.	yes	1
PERIOD_START	char	4	mmdd	0101 to 1231 and usually before period end date (PERIOD_END)	no	1
PERIOD_END	char	4	mmdd	0101 to 1231 and usually after period start date (PERIOD_START)	no	1
POD_QQ	char	2	aa	SW, southwest; NW, northwest; SE, southeast; NE, northeast; S2, south half; N2, north half; E2, east half; W2, west half	no	1
POD_Q	char	4	aaaa	SW, southwest; NW, northwest; SE, southeast; NE, northeast; S2, south half; N2, north half; E2, east half; W2, west half; LT, lot; TR, tract	no	1
POD_SEC	char	2	##	01 to 36	no	1
POD_TWN	char	4	##cc	## = 01 to 48 cc = N, S, NH, SH. N, north; S, south; NH, north half; SH, south half[1]	no	1
POD_RNG	char	4	##cc	## = 18 to 71 cc = E, W, EH, WH. E, east; W, west; EH, eastern half; WH, western half[2]	no	1

Table 6. Field description for the main (main) data-base table—Continued

Field name	Data type	Entry width	Entry template	Template limits	Required field	Entry page number
POD_REF	char	3	ccc	MD, Mount Diablo (default); SB, San Bernardino; W, Willamette; GSR, Gila and Salt River; B, Boise	no	1
DUTY	float	9	######.##		no	1
DUTY_BALANCE	float	9	######.##		no	1
DUTY_UNIT	char	3	ccc	AFA, acre-feet/annum; AFS, acre-feet/season; MGA, million gallons/annum; MGS, million gallons/season[3]	yes	1
DIV_RATE	float	8	####.###		no	1
DIV_BALANCE	float	8	####.###		no	1
POU_ACRE_TOTAL	float	9	#####.###	Computed only if water use (USE) is equal to IRR, irrigation; IRC, irrigation Carry Act; IRD, irrigation Desert Land Entry Act; REC, recreation; DEC, decreed	no	1
ACFT_STOR	float	9	######.##		no	1
WELL_LOG1	char	6	######		no	1
WELL_LOG2	char	6	######		no	1
WELL_LOG3	char	6	######		no	1
FILE_DT	date	N/A	mmddyyyy	Before date of entry	yes	2
PRIOR_DT	date	N/A	mmddyyyy	If previous application number (PREV_APP#) is blank, then file date (FILE_DT) is equal to priority date (PRIOR_DT). If PREV_APP# is not blank, PRIOR_DT is equal to priority date of previous application.	yes	2
RTN_DT	date	N/A	mmddyyyy	After filing date (FILE_DT) and before week after date of entry	no	2
MAP_DT	date	N/A	mmddyyyy	Before week after date of entry	no	2
MAP#	char	10	a#####aa##		no	2
PUB_DT	date	N/A	mmddyyyy	After filing date (FILE_DT) and before week after date of entry	no	2
PUB_END_DT	date	N/A	mmddyyyy	After publication date (PUB_DT)	no	2
PROTEST	char	1	c	"Y", "W", or blank. If protest (PROTEST) is yes, and application status (APP_STATUS) is equal to ready for action (RFA), then APP_STATUS is equal to ready for action, protested (RFP).	no	2
FIELD_INV	char	1	c	"Y" or blank	no	2
DECREE_NAME	varchar	18	a....		no	2
RFA_DT	date	N/A	mmddyyyy	If application status (APP_STATUS) is equal to application (APP) and ending publication date (PUB_END_DT) is not blank, then ready for action date (RFA_DT) is equal to PUB_END_DT plus 30 days.	no	2

Table 6. Field description for the main (main) data-base table--Continued

Field name	Data type	Entry width	Entry template	Template limits	Required field	Entry page number
WDR_DT	date	N/A	mmddyyyy	After file date (FILE_DT). If application status (APP_STATUS) is equal to withdrawn (WDR), then withdrawn date (WDR_DT) cannot be blank.	no	2
PER_DT	date	N/A	mmddyyyy	If application status (APP_STATUS) is equal to permit (PER), certificate (CER) or revocable permit (RVP), then permit date (PER_DT) cannot be blank.	no	2
CAN_DT	date	N/A	mmddyyyy	After file date (FILE_DT). If application status (APP_STATUS) is equal to cancelled (CAN), then cancellation date (CAN_DT) cannot be blank.	no	2
CAN_PORTION	char	1	c	"Y" or blank	no	2
RUL_DT	date	N/A	mmddyyyy	After file date (FILE_DT). If ruling status (RUL_STATUS) is not blank, then ruling date (RUL_DT) cannot be blank.	no	2
RUL_STATUS	char	1	c	A or D. If application status (APP_STATUS) is equal to denied (DEN), the ruling status (RUL_STATUS) is equal to denied (D).	no	2
RUL#	char	6	#####		no	2
RUL_RSN	varchar	12	a....		no	2
POC_EXT	char	1	c	"Y" or blank	no	2
POC_DUE_DT	date	N/A	mmddyyyy	After permit date (PER_DT)	no	2
POC_RCD_DT	date	N/A	mmddyyyy	After proof of completion due date (POC_DUE_DT)	no	2
PBU_EXT	char	1	c	"Y" or blank	no	2
PBU_DUE_DT	date	N/A	mmddyyyy	After permit date (PER_DT)	no	2
PBU_RCD_DT	date	N/A	mmddyyyy	Before proof of beneficial use due date (PBU_DUE_DT). If application status (APP_STATUS) is equal to certificate (CER), then proof of beneficial use, received date (PBU_RCD_DT) cannot be blank.	no	2
PBU_MAP_DUE	char	1	c	"Y" or blank	no	2
PBU_MAP#	char	10	a#####aa##		no	2
PBU_MAP_RCD_DT	date	N/A	mmddyyyy	Before proof of beneficial use due date (PBU_DUE_DT). If proof of beneficial use, map received date (PBU_MAP_RCD_DT) is equal to yes (Y) and application status (APP_STATUS) is equal to certificate (CER), then proof of beneficial use, map due (PBU_MAP_DUE) cannot be blank.	no	2
CER_DT	date	N/A	mmddyyyy	If application status (APP_STATUS) is certificated (CER), then certificate date (CER_DT) is after permit date (PER_DT). If application status (APP_STATUS) is equal to certificate (CER), then certificate date (CER_DT) cannot be blank.	no	2
EXP_DT	date	N/A	mmddyyyy	After file date (FILE_DT). If the application number (APP#) is temporary number, then expiration date (EXP_DT) cannot be blank.	yes	2
OTHER_DT	date	N/A	mmddyyyy		no	2

Table 6. Field description for the main (**main**) data-base table--Continued

Field name	Data type	Entry width	Entry template	Template limits	Required field	Entry page number
DATE_REMARK	varchar	64	a...		no	2
USE_UNITS	varchar	64	a...		no	4
REMARK	varchar	240	a...		no	5
REP	varchar	1	ccccccccc	M, monthly; Q, quarterly; A, annually	no	2
SUP_ACRES	float	8	###,###.##		no	4
SUP_ACRE_FT	float	8	###,###.##		no	4
SUP_SRC	char	5	ccccc		no	4
SUB_BASIN	char	5	ccccc		no	4
SUP_ADJ	float	8	###,###.##		no	4

Table 7. Field description for owner (**owner**) data-base table

[Abbreviations: #, numeric column; a, alphanumeric column]

Field name	Data type	Entry width	Entry template	Template limits	Required field	Entry page number
APP#	char	10	b######aa##	b=V,R,J 0 to 9	yes	1
OWNER_NAME	varchar	36	a...		yes	5
OWNER_TYPE	char	1	c	O, original owner; C, current owner; B, both	yes	5
OWNER_PCT	float	5	##.##		no	5
OWNER_DUTY	float	9	######.##		no	5
OWNER_DIV_RATE	float	8	####.###		no	5

Table 8. Field description for place of use (**pou**) data-base table

[Abbreviations: #, numeric column; a, alphanumeric column; c, character column]

Field name	Data type	Entry width	Entry template	Template limits	Required field	Entry page number
APP#	char	10	b#####aa##	b=V,R,J 0 to 9	yes	1
POU_QQ	char	2	aa	SW, southwest; NW, northwest; SE southeast; NE, northeast; S2, south half; N2, north half; E2, east half; W2, west half	no	3
POU_Q	char	4	aaaa	SW, southwest; NW, northwest; SE southeast; NE, northeast; S2, south half; N2, north half; E2, east half; W2, west half	no	3
POU_SEC	char	2	##	01 to 36	no	3
POU_TWN	char	4	##cc	## = 01 to 48 cc=N,S, NH, SH N, north; S, south; NH, north half; SH, south half	no	3
POU_RNG	char	4	##cc	## = 18 to 71 cc = E, W, EH, WH E, east; W, west; EH, east half; WH, west half	no	3
POU_REF	char	3	ccc	MD, Mount Diablo; SB, San Bernardino; W, Willamette; GSR, Gila and Salt River; B, Boise	no	3
POU_ACRE	float	9	#####.###		no	3

Table 9. Field description for supplemental (**supplement**) data-base table

[Abbreviations: #, numeric column; a, alphanumeric column]

Field name	Data type	Entry width	Entry template	Template limits	Required field	Entry page number
APP#	char	10	b#####aa##	b=V,R,J 0 to 9	yes	1
SUPPL_APP#	char	10	b#####aa## aa = A-Z,#	b=V,R,J 0 to 9	no	4
SUPPL_AMT	float	9	######.##		no	4

Table 10. Field description for lookup tables

Field name	Data type	Entry width	Key field or lookup table	Entry page number
Hydrologic Basin (basin_lut)				
BASIN	char	4	key	1
BASIN_NAME	varchar	55	lookup	1
BASIN_STATUS	varchar	17	lookup	1
REGION	char	2	lookup	1
REGION_NAME	varchar	24	lookup	1
County (county_lut)				
COUNTY	char	2	key	1
COUNTY_NAME	varchar	11	lookup	1
Water source (source_lut)				
SOURCE	char	3	key	-
SOURCE_NAME	varchar	20	lookup	1
Application status (status_lut)				
APP_STATUS	char	3	key	1
APP_STATUS_NAME	varchar	28	lookup	1
Water use (use_lut)				
USE	char	3	key	1
USE_NAME	varchar	22	lookup	1

Table 11. Codes used for county names in **county_lut**

County code (COUNTY)	County name (COUNTY_NAME)
CC	CARSON CITY
CH	CHURCHILL
CL	CLARK
DO	DOUGLAS
EL	ELKO
ES	ESMERALDA
EU	EUREKA
HU	HUMBOLDT
LA	LANDER
LI	LINCOLN
LY	LYON
MI	MINERAL
NY	NYE
PE	PERSHING
ST	STOREY
WA	WASHOE
WP	WHITE PINE

Table 13. Codes used for source names in **source_lut**

Source code (SOURCE)	Source description (SOURCE_NAME)
EFF	EFFLUENT
GEO	GEOTHERMAL
LAK	LAKE
OGW	OTHER GROUND WATER
OSW	OTHER SURFACE WATER
RES	RESERVOIR
SPR	SPRING
STO	STORAGE
STR	STREAM
UG	UNDERGROUND

Table 12. Codes used for application status in **status-lut**

Application status code (APP_STATUS)	Application status description (APP_STATUS_NAME)
ABN	ABANDONED
ABR	ABROGATED
APP	APPLICATION
CAN	CANCELLED
CER	CERTIFICATE
CUR	CURTAILED
DEC	DECREED
DEN	DENIED
EXP	EXPIRED
FOR	FORFEITED
PER	PERMIT
REL	RELINQUISHED
RES	RESERVED
RFA	READY FOR ACTION
RFP	READY FOR ACTION (PROTESTED)
RLP	RELINQUISH A PORTION
RVK	REVOKED
RVP	REVOCABLE PERMIT
SUS	SUSPENDED
VST	VESTED RIGHT
WDR	WITHDRAWN

Table 14. Codes used for water-use names in **use_lut**

Use code (USE)	Use description (USE_NAME)
COM	COMMERCIAL
CON	CONSTRUCTION
DEC	AS DECREED
DOM	DOMESTIC
DWR	DEWATERING
ENV	ENVIRONMENTAL
IND	INDUSTRIAL
IRC	IRRIGATION (CAREY ACT)
IRD	IRRIGATION (DLE)
IRR	IRRIGATION
MM	MINING AND MILLING
MUN	MUNICIPAL
OTH	OTHER
PWR	POWER
QM	QUASI-MUNICIPAL
REC	RECREATIONAL
STK	STOCKWATERING
STO	STORAGE
WLD	WILDLIFE

GLOSSARY

4GL. Fourth generation language. A high-level or English-like programming language.

ABF. Application by forms. Language used for the data-base application.

Abrogation. A water-permit application that changes the point of diversion, place of use, or manner of use of a previous application.

Application Number. Request for water use (other than domestic); number is assigned by NDWR at time of filing. After all legal requirements have been satisfied, the application may be permitted and subsequently certificated.

Duty. Amount of water applied for by a water-rights applicant.

MOU. Manner of water use.

PLSS. Public Land Survey System. Rectangular system of land surveys administered by the Bureau of Land Management for the Western United States.

POD. Point of diversion. The location of a water diversion.

POU. Place of use. The area of land where diverted water is used.

Proof of Beneficial Use. Proof of beneficial use is the final proof required by the terms of the permit. The filing date depends on the amount of work that the permit holder contemplated when he filed his application.

Proof of Completion. Proof of completion is normally due one and a half years after the date the permit is issued.

Supplemental. Water usage from multiple sources, where use is restricted to a fixed duty.