

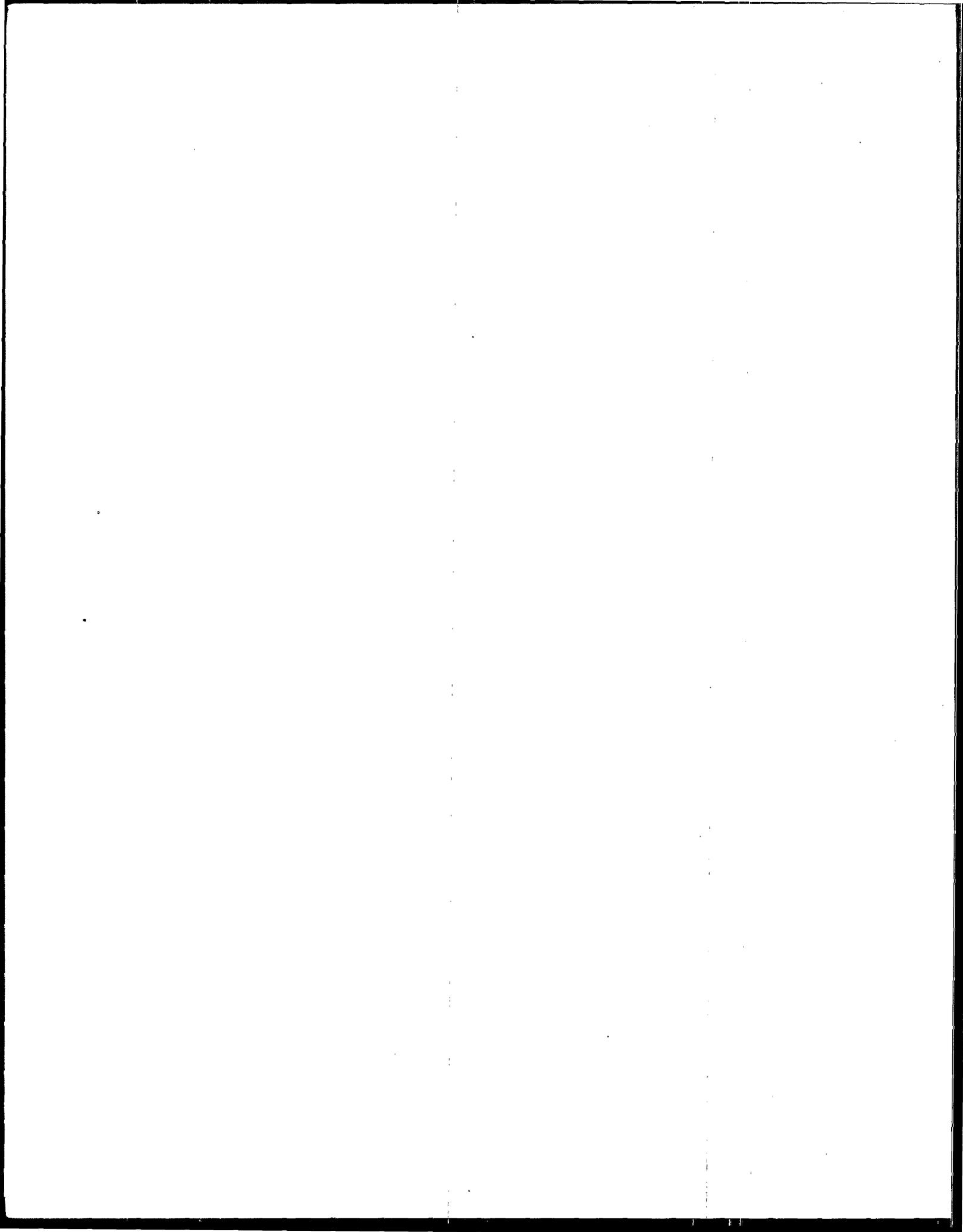


Special Interest Group (SIG) Forum For Fish Consumption Risk Management

User's Manual, v. 1.0

A Division of the Nonpoint Source Information
Exchange Computer Bulletin Board System (NPS BBS)

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1. Overview

The Nonpoint Source Information Exchange Bulletin Board System (NPS BBS) provides state and local agencies, private organizations, businesses, and concerned individuals with timely, relevant NPS information, a forum for open discussion, and the ability to exchange computer files.

Within the NPS BBS, a Special Interest Group (SIG) Forum functions as a discrete, fully functioning sub-BBS. Information within the Fish Consumption SIG Forum is focused on fish consumption bans, advisories, and related reports.

YOU CAN USE THE FISH CONSUMPTION SIG FORUM TO:

- Search a menu-driven database system that contains information on fish consumption bans and advisories, consumption surveys, related reports and documents, and names and phone numbers of colleagues who can provide additional information or supply documents.
- Read news and bulletins posted by the SIG Forum Technical Monitors on behalf of the U.S. Environmental Protection Agency (EPA) or users.
- Share your own articles and comments online for the benefit of others and receive valuable feedback.
- Ask questions and conduct discussions directly with colleagues studying risk management for fish consumption.
- Exchange public and private memoranda with other users or with the System Operator (Sysop).
- Exchange computer files, including databases, electronic spreadsheets, word-processor files, and software.
- Use similar functions to interact with the users of the NPS BBS's Main Board and other SIG Forums.

Additional Documentation

This user's manual, a supplement to the NPS BBS user's manual, describes how to access and use the major capabilities of the Fish Consumption SIG Forum.

To gain the maximum benefit from the NPS BBS and the Fish Consumption SIG Forum, you need the NPS BBS user's manual. The fastest and easiest way to obtain an NPS BBS user's manual is download it as a file from the NPS BBS Main Board. MAN-ASC.ZIP is an ASCII version of the NPS BBS user's manual, and MAN-WP51.ZIP is a WordPerfect 5.1 version.

If you can access the NPS BBS but cannot print a downloaded file with the NPS BBS user's manual, you can order the manual by answering Script Questionnaire 2 on the Main Board. (Type S at the "Main Board Command?" prompt.) If you need an NPS BBS manual and cannot get online, then write to the U.S. EPA Office of Water, NPS Information Exchange (WH-553), 401 M Street, SW, Washington, DC 20460.

Appendix I in either manual lists and describes all user commands and subcommands that are available to you on the Main Board of the NPS BBS and in the SIG Forums.

Saving Time and Money Online

The NPS BBS, SIG Forums, and online door programs have been designed to let you get useful results quickly, with a minimum of learning. The cost of your telephone calls into the NPS BBS will add up rapidly, however, if you use the system inefficiently.

You can minimize your time online in several ways. Time invested in reading the manuals will pay for itself rapidly by allowing you to reduce the time you spend online. After you read the manual and the online help messages for the BBS and SIG Forum, you will be able to send more pointed question messages to the Sysop and the Technical Monitor.

You should also invest some online time in experimenting with the NPS BBS and SIG Forum functions. The Guided Tour in the NPS BBS user's manual is an excellent way to begin this process. After you become familiar with the available functions, you can suppress the tedious redisplay of the BBS menu by typing X at the BBS or SIG Forum command prompts. You can see the menu again at any time by typing MENU, or you can turn the automatic display back on permanently by typing X again.

You can use the Q-Mail Door on the BBS Main Board to upload and download messages that you can write and read offline on your own PC. See the NPS BBS user's manual or Bulletin 11 on the NPS BBS Main Board for more information about Q-mail.

Files will upload and download much faster if they are compressed ("zipped") with the PKZ110.EXE software. (See Section 3—Zipping and Unzipping Files.)

If you use log/capture files (see Section 5—Seeing or Saving Your Search Results) to record all your online activity, you will be able to review your online activities offline.

Perhaps the most important way to save time and money is to plan your online activity before you dial in. Advance planning is especially useful for searches in NPS BBS door databases and will increase the effectiveness of your experimentation. Before you open the door to the Fish Consumption Database, please read this manual and skim the appendices that list the findable search terms. Writing down your strategy for searching, sorting, and listing reports may help you to collect your thoughts. Also, online help is available from the command menus as you actually access the database.

As you become more familiar with the BBS software, you will discover quicker and easier ways to use its many features.

2. Accessing the NPS BBS and the SIG Forum

Accessing the NPS BBS

To access the NPS BBS, you will need:

- A personal computer or terminal
- Telecommunications software (such as CrossTalk or ProComm)
- A modem (1200 or 2400 baud)
- A phone line that will handle modem communications

Although the NPS BBS is running on an IBM-compatible personal computer with MS-DOS, almost any sort of computer that can place phone calls can access the NPS BBS. Refer to the NPS BBS user's manual and your computer and telecommunications software manuals if you have problems getting online. If you still can't get online, you can obtain help by calling the appropriate person listed in Appendix II of this manual.

THE NPS BBS PHONE NUMBER IS (301) 589-0205.

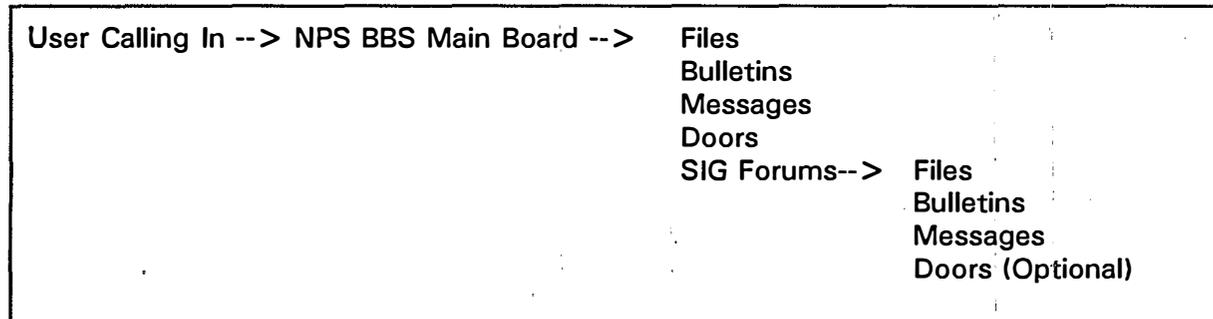
The telecommunication parameters are: *No parity, 8 data bits, 1 stop-bit (N-8-1)*. Choose *full duplex* and *no local echo* if your system allows these settings. Set your system to emulate a *VT-100* terminal if it can. Emulation of an *ANSI* terminal also works well.

If the NPS BBS's three phone lines are all in use, you will get a busy signal. The busiest times are the late morning and early afternoon (Eastern time). Activity drops during lunch time. The easiest times to access the NPS BBS are early mornings, evenings, and weekends.

When you first access the NPS BBS, you will be required to answer some registration questions about yourself and create a password. You must remember your password and use it every time you access the NPS BBS.¹

¹Most telecommunications programs allow you to automate tedious processes such as log-on by writing batch command files that interact with the host system and supply keystrokes on your behalf. LOGONEZ.ZIP, a downloadable file in File Directory 1 of the SIG Forum, contains a template for a ProComm batch file that automatically logs a ProComm user onto the BBS. Donations of similar files for other telecommunications programs will be greatly appreciated.

How the NPS BBS Is Structured

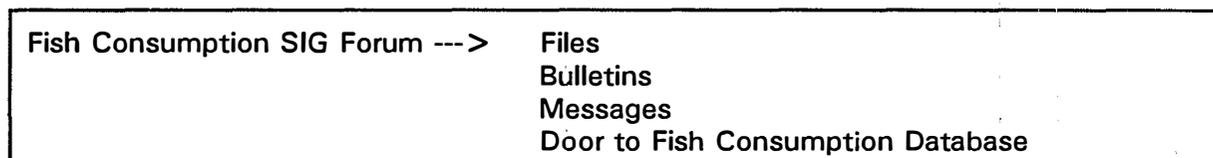


Accessing and Exiting the SIG Forum

After you get online (that is, after the NPS BBS answers your call) and you complete the registration process, you must leave a comment to the Sysop (type C at the Main Board Command? prompt) and request access to the Fish Consumption SIG Forum. You will then be able to access the SIG Forum within one to two working days. This process ensures that an accurate list of SIG Forum users is generated.

Access (Join) the Fish Consumption SIG Forum by typing J 2 and <Enter> after the "Main Board Command?" prompt. To leave the SIG Forum and return to the Main Board of the NPS BBS, type A (for Abandon).

The SIG Forum Main Menu (Figure 1) is almost identical to the Main Menu of the NPS BBS Main Board. The SIG Forum has virtually the same built-in functions as the Main Board of the NPS BBS.



To enter a command at the "SIG Command?" prompt, simply type the command abbreviation listed on the Main Menu and press <ENTER>. For example, to read messages type R. Additional commands and subcommands are defined in Appendix I of this manual.

To end a session and leave the NPS BBS completely, type G (for Goodbye). You should never hang up the phone without typing G at a "Command?" prompt to log yourself off the system. If you do not log off, the NPS BBS takes several minutes to recognize that you are gone, tying up the phone line unnecessarily.

=====[EPA Nonpoint Source Program Electronic Bulletin Board]====
 FISH CONSUMPTION SIG FORUM MENU

MESSAGES	FILES/DIRECTORIES	SETTINGS & MISC.
[C]omment to Sysop [E]nter a Message [K]ill a Message [Q]uick Message Scan [R]ead Messages [REPLY] to Msg(s) [RM] Re-Read Mem'd Msg [TS] Text Search Msgs [Y]our Personal Mail	[B]ulletin Listing [F]ile Directories [D]ownload a File [DB] download batch [FLAG] for download [L]ocate files [U]pload a File [UB] Upload batch [N]ew Files [Z]ippy Directory Scan	[M]ode Graphics [P]age Length [T]ransfer Protocol [USERS] list users [X]pert On/Off [W]rite User Info [V]iew Settings [NEWS] Screen display [CHAT] between nodes [S]cript questionnaire
SPECIAL INTEREST GROUPS	[G]oodbye (to hang up) For HELP, type H plus the command abbreviation	DOORS (Databases)
[A]bandon a SIG Forum		[OPEN] a door Type OPEN 1 for the Fish Consumption Database

Figure 1. SIG Forum Main Menu

3. NPS BBS Main Board and SIG Forum Features

Files

Sharing files is one of the most important functions of a bulletin board system. A variety of files such as software programs and documents are stored on the NPS BBS Main Board for downloading (transfer to your computer). Your file donations (uploads) will help to keep the file store up-to-date and useful. Main Board Bulletin 2 is a primer on uploading and downloading files.

The Fish Consumption SIG Forum does not maintain its own store of general interest files. It stores files specifically of interest to members of this SIG Forum. Files that have been checked by the SIG Forum Technical Monitor are located in File Directory 1 of the SIG Forum; recently uploaded, unchecked files are located in File Directory 2 of the SIG Forum.

To view the directories (lists) of files in the SIG Forum, type **F** at the "SIG Command?" prompt. Choose the number of the directory you wish to view. For further instructions on searching the file directories, uploading, and downloading, see Appendix I of this manual or Chapters 8 and 9 of the NPS BBS user's manual.

You cannot download the data files or working program files from the Fish Consumption Database in the SIG Forum's door (discussed later in this chapter). You can, however, download the results of the searches you do using the Fish Consumption Database inside the door by selecting the Wide File option at the end of your search. This option creates a downloadable, zipped file with your personal search results. (This option will be discussed in detail in Chapter 5.)

Zippping and Unzippping Files

Most files available for downloading anywhere on the NPS BBS are stored in a zipped (compressed and consolidated) format and have the ".ZIP" filename extension. Use the software program PKUNZIP.EXE (available on the NPS BBS) to unzip files that you download and use PKZIP.EXE to zip files that you want to upload. When you download PKZ110.EXE from the NPS BBS to your system and run it, it will automatically write copies of the zipping program, PKZIP.EXE, and the unzipping program, PKUNZIP.EXE, on your disk drive. If you are unfamiliar with zipping and unzipping, read Main Board Bulletin 4. Instructions on how to upload and download files are also available in the NPS BBS user's manual, the NPS BBS's online help system, and the manual for your telecommunications software.

Zippping and Unzippping for MacIntosh Users

MacIntosh users can unzip files by using a shareware file called MACUNZIP.SIT. This file is available for downloading on the NPS BBS. If you are using a MacIntosh, go into the transfer protocol preferences part of your telecommunications program and choose *binary* rather than *Macbinary* format. Then download MACUNZIP.SIT with the *MacBinary transfer protocol* turned ON. (This protocol properly accounts for the blocks and forks of the MacIntosh file structure.)

February 26, 1992

Later, when you download non-Mac-format, ASCII-format text files from the Main Board or SIG Forum, make sure that the *MacBinary transfer protocol* is turned OFF. You will not be able to unzip non-Mac files downloaded while the *MacBinary transfer protocol* is ON. The MACUNZIP.SIT file contains its own documentation.

UnStuffit Delux is a commercial program that will also unzip a file on the Mac, but it will suffer the same confusion if the *MacBinary transfer protocol* is not OFF when you download files from the NPS BBS.

Users of other systems that do not use MS-DOS may not be able to unzip files downloaded from the NPS BBS and should consult the Sysop for assistance.

Use of ASCII Format

Before uploading a text file for the use of other users, save it in ASCII format so that other users can read it no matter what kind of computer or word processor they have. (Some word-processing programs call ASCII format *DOS-text* or *MAC-text* format.)

Bulletins

Reading the bulletins available on the Main Board of the NPS BBS and in the SIG Forum can greatly enhance your experience online. Bulletins are short articles, announcements, and lists that can be read online or downloaded for future reference.

Bulletins in the Fish Consumption SIG Forum include lists of keywords for searching the Fish Consumption Database and other pertinent news articles and event announcements.

To view a list of bulletins in the SIG Forum, type **B** at the "SIG Command?" prompt. The list of available bulletins will be displayed. At the "Bulletin List Command?" prompt, type the number of the bulletin you wish to read. For further instructions on searching the bulletin list and downloading bulletins, see Appendix I of this manual or Chapter 7 of the NPS BBS user's manual.

Messages

Peer-to-peer information exchange is the primary reason for having a SIG Forum, and key to that exchange is the successful transfer of messages between users.

SIG Forum users may leave messages to individuals, to everyone in the SIG Forum, or to selected groups. The NPS BBS program stamps every message with a subject, the date, and the time. When the message is read, the date and time of receipt are also posted. Callers may search all the public messages for subjects or words or phrases and may automatically scan for messages with a common subject.

Five types of messages can be sent on the NPS BBS Main Board or in the SIG Forum:

- **Public messages**—messages from one user to another that can be read by all users.
- **Private messages**—messages from one user to another that can be read by only the sender and receiver (and the Sysop).
- **General messages**—messages from one user addressed to all other users.
- **Group messages**—messages that can be read only by users who know the password assigned by the sender.
- **Comment to the Sysop**—messages from one user to the Sysop that can be read by only the Sysop.

To read messages posted in the SIG Forum, you must first join the SIG Forum. To read all messages (public, general, and your own private messages) from most recent to oldest, type **R L** (for **Read Last**) at the "SIG Command?" prompt. To read only those messages (public, general, and your own private messages) that you have not already read, type **R S** (for **Read Since**) at the "SIG Command?" prompt.

To reply to a message you have just read, type **RE** at the "End of Message Command?" prompt. To reply to any other message posted in the SIG Forum, at the "SIG Command?" prompt type **REPLY** followed by the number of the message to which you wish to respond.

To post a new message for SIG Forum users only, type **E** (for **Enter**) at the "SIG Command?" prompt. The subcommand to save and send your message after you have completed writing it is **S**. To post a message on the Main Board of the NPS BBS, you must type **E** at the "Main Board Command?" prompt.

Another type of message is the Comment to the Sysop. This is a way to ask the NPS BBS System Operator (Sysop) technical questions about accessing the NPS BBS and using the Main Board and SIG Forum features. From the "SIG Command?" or "Main Board Command?" prompt, type **C**.

For complete information on all the types of messages and detailed instructions on posting, replying to, and sending messages, see Chapter 5 of the NPS BBS user's manual.

Doors to Databases

Doors are features that allow access to other programs without exiting the NPS BBS. A number of doors are available on the Main Board of the NPS BBS. Type **OPEN** at the "Main Board Command?" prompt to see a list of available doors. In the Fish Consumption SIG Forum, one door is available—the Fish Consumption Database. Complete information on accessing and searching this database is presented in Chapter 5 of this manual.

4. Getting Help

Online help messages are available by typing **H** at almost any prompt in the Main Board of the NPS BBS, the SIG Forum, or the SIG Forum's database.

In the Fish Consumption Database, typing **H** will display explanations of the currently available menu options. **H** can be used to display help information from most menu prompts. In the database, you cannot type **H** for help when you are being prompted to type a search criterion into a data field. (The program will assume that your search criterion for that data field is the letter **H**.)

The remainder of this manual will focus on the operation of the Fish Consumption Database. If you are familiar with your computer and telecommunications software, then you may be able to use the NPS BBS and the SIG Forum without reference to the NPS BBS user's manual. After you read this manual, the help messages may be sufficient to allow you to use the database without referring to this manual very often.

If you have questions that the user's manuals do not answer, refer to Appendix II for the names and telephone numbers of other information sources.

The SIG Forum Main Menu (Figure 1) summarizes the SIG Forum's capabilities and is useful as a quick reference for commands and as a map for further exploration. Once you are familiar with the basic commands available in the SIG Forum, you can save time online by turning off the Main Menu display by typing **X** (for eXpert) at the "SIG Command?" prompt. Typing **X** again will turn the complete Main Menu display back on.

5. Searching the Fish Consumption Database

Database Contents

The Fish Consumption Database is composed of three data files that hold data about fish consumption bans and advisories, documents, and contacts, respectively. Each data file holds many records (discrete sets of data) about individual bans and advisories, documents, or contacts. (See Table 1.)

The database program allows searches of each data file individually (single file searches) or all three data files simultaneously (all files search). Although the data fields (information categories) are different for each data file, basic search strategies are the same for all searches.

Entering the Database Door

To enter the database door, type **OPEN 1** at the "SIG Command?" prompt. After a few moments, you will see the Pre-search Menu.

```
Fish Consumption Database
      Version 1.x
      Pre-search Menu

Search <B>ans and Advisories File
Search <D>ocuments File
Search <C>ontacts File
Search <A>ll Files
<Q>uit to the SIG Forum
Enter your choice or <H>elp:
```

Basics of Performing a Search

Entering Your Search Criteria

The basic flow of events is the same for all search options (see Figure 2). After you choose what type of search you wish to do from the Pre-Search Menu, you are shown a list of the data fields that are searchable for that data file. If you choose to continue from this screen, you will be given the opportunity to specify search criteria for up to six of these fields. Simply type in the character string, word, or phrase you want to find in each field. If you do not want to specify a search criterion for a given field, type **<ENTER>** for that field. The program is insensitive to upper case vs. lower case.

Table 1. Contents of Fish Consumption Database

DATA FILE NAME	DATA FIELDS IN THE FILE	EXAMPLE OF A RECORD
Bans and Advisories	EPA REGION* STATE WATEBODY GEOGRAPHIC EXTENT POLLUTANT SPECIES POPULATION Start Date End Date Ban ID Code Contact Person ID Code	<i>05 MI Lake Superior MI WI and MN waters, also to tributaries PCBs trout-lake 10-20" RGP 10/01/80 12/31/80 BAN-0000 CON-0000</i>
Documents	AUTHOR(S) TITLE KEYWORDS ABSTRACT Publication Date Publisher or Agency Name NTIS or Other Pub. ID Code Document ID Code Check Date Contact Person ID Code	<i>Thomas, Tom Pinetree Bay Toxics Action Program Bioaccumulation, Biota, CSOs, Coastal, Databases, Decision- making, Ecological risk... This report provides a synthesis of information describing the geographic extent and severity of chemical contamination in Pinetree Bay... January 1986 U.S. EPA NTIS PB00-1000000/AA DOC-0000 01/10/90 CON-0000</i>
Contacts	EPA REGION STATE LAST NAME FIRST NAME Contact Person ID Code Courtesy Title Job Title, Company, Department Address Phone Number(s) Fax Number Check Date	<i>01 VT Jones Roberta CON-0000 Dr. Associate Fisheries Biologist VT Dept. of Natural Resources Fisheries Division 100 Main Street, Room 333 Applebury, VT 00111 (802) 888-2222 (802) 888-2223 06/06/86</i>

*Data fields shown in capital letters are searchable.

PRE-SEARCH MENU ----->

Choose any option and you exit from this menu.

All searches can continue to the Post-search Menu

Search ans and
Advisories File

Search <D>ocuments
File

Search <C>ontacts File

Search <A>ll Files

<H>elp to see further
instructions

<Q>uit to the SIG
Forum

SEARCHING ----->

Enter and revise until you are ready to list the search results or return to the Pre-search Menu.

<C>ontinue to enter
search criteria

Is this correct? <N>
to revise search
criteria

Is this correct? <Y>
to authorize
program to begin
search of selected
criteria

<H>elp to see further
instructions

<Q>uit to the
Post-search Menu

POST-SEARCH MENU

Choose any option at any time and remain at this Menu until you <Q>uit to the Pre-search Menu.

Broaden the Search

<A>dd additional
search
<U>ndo last

<R>eset and <A>dd a
more specific
search

<S>ort

<T>erse listing to
screen

<V>erbose listing to
screen

<W>ide file to SIG's
Disk (when
available)

<H>elp to see
further
instructions

<Q>uit to the Pre-
search Menu

Figure 2. Fish Consumption Database Options

Before going ahead with the search, the program allows you to review and edit your criteria or cancel the search. When it searches, the program ignores any fields that you leave blank and selects only those records in the data file that meet ALL of the criteria specified.

If you are doing an all files search, you will be given five blank lines on which to type the words or character strings you have chosen as your search criteria. You can use as many of these five blank lines as you want to define your search. Warning: An all files search is much slower (though more thorough) than a single file search.

There are a number of different ways in which you can approach your searches of the data files. The first is to decide on a very specific search strategy before actually using the database. This requires knowing exactly what types of information are available in the database. Table 1 outlines the types of data available in each of the three data files. Appendices III and IV to this manual include lists of

currently used Documents data file keywords, species and size classes of fish and shellfish, pollutants, and population groups. These lists also are posted on the Fish Consumption SIG Forum as bulletins.

Another strategy would be to select a very broad search criterion and briefly skim the results after the search using a terse list (see below). For example, if you are searching the Bans and Advisories data file and you type the search criterion **catfish** in the Species data field, you will see all listings for all types of catfish. Based on these listings, you can then select which individual varieties of catfish you wish to select for a narrower search.

A third option is to view every record in a data file. To select every record in an entire data file, you must search for something that is in every record. The simplest way to do this is to search for all the vowels (a, e, i, o, u, and y) in a text field such as species, author, or last name. Accumulate the vowel searches with the Add option (see below).

Broadening Your Search

Use General or Short Terms

An effective way to broaden the scope of your searches is to use as search criteria short words or character strings that will be present in many related words.

For example, if you are searching the Documents data file and you type in **toxic** for the Abstract data field, any document with the words *toxic*, *toxics*, *toxicology*, and *toxicologist* in the abstract will be selected. Typing in **ology** will find *toxicology*, *ecology*, and *biology*.

Use the Add Option

Another way to broaden your search is to use the Add option when the initial search is complete. This option allows you to add the results of a second search to the records found in the first search. In other words, it allows you merge the results of two searches into one longer list. The Add option is discussed in more detail below.

Use the Undo Last Option

If you have been accumulating the results of a number of different searches by using the Add option, you can use the Undo Last option to erase the current search criteria. The program then deselects the records found in the most recent search. It retains selection of all records located by any previous searches.

Suppose, for example, that you are searching the Bans and Advisories data file and you complete one search typing only the search criterion **7** in the EPA Region data field. Then you use the Add option to add records from EPA Region 6 by doing a second search using the search criterion **6** in the EPA Region data field. Then you decide that you are not really interested in records pertaining to EPA Region 6 after all. You can use the Undo Last option to remove the most recent search results—the EPA Region 6 records—from your cumulative list. You can then view your EPA Region 7 list by itself or use the Add option to add some other types of records to your list.

Narrowing Your Search

Specify Multiple Data Fields

The database automatically narrows your search as you specify criteria for more than one data field.

For example, if you are searching the Bans and Advisories data file and you type in **trout** for the Species data field and **10** for the EPA Region data field, only those bans and advisories that involve trout in EPA Region 10 will be selected. The more data fields you type criteria into, the fewer bans and advisories will meet all the criteria.

Use Specific Terms

Another way to narrow your search is to use very specific terms as your search criteria.

For example, if you are searching the Documents data file and you type in **toxicology** for the Title data field, only those documents that have the specific word *toxicology* in the document title will be selected. In the Bans and Advisories data file, typing **trout-lake** will prevent the program from selecting *trout-brown* or just plain *trout*.

Post-Search Options

When the program has finished searching the database for all the search criteria you selected, it will display the most recent search criteria, the number of records found by the current search, and the number of records accumulated by the current series of searches. Next, a Post-search Options Menu will appear:

<T>erse, <V>erbose, <W>ide, <A>dd, <S>ort, <U>ndo last, <R>eset, <Q>uit

Now you have the options of altering the search results, sorting the search results, or seeing/saving the search results. You can execute one of these options by typing its first character.

Altering Your Search Results

- **[A]dd** - Prompts you to add to the list of selected records by adding to or changing the search criteria. (See example above under Broadening Your Search.) Records found by the previous search(es) in a series of searches remain selected and will display in terse and verbose lists (discussed below). No matter how many different search strategies find a particular record, it will be listed only once. The Reset option terminates a series of searches.
- **[U]ndo last** - Erases the current search criteria and reverts to the previous criteria in a series built with the Add option. The program deselects only the records found by the criteria from the most recent search. It retains selection of all records located by the other searches in the series. You can undo only the most recent criteria searched; the earlier criteria in a series can be undone only by using the Reset or Quit option.

- **[R]eset** - Erases all search criteria and deselects all records so a fresh list of records can be generated from the data file. After choosing Reset, choose Add to start a fresh search of the data file. The Reset option does not erase the Sort criteria already chosen.

Sorting Your Search Results

- **[S]ort** - Prompts you to specify the sequence of selected records in listings by numbering the sort priority of the data fields. For example, to sort a document listing by author and title, type **S** and then type a **1** by Author and a **2** by Title. The records will be alphabetized by author, and documents with the same author will be alphabetized by title as a subgroup.

Seeing or Saving Your Search Results

- **[T]erse list** - Displays on the screen concise information for all records that match the search criteria, including information about the contact person. The main reason to view the terse listing is to see whether your search and sort strategies worked as well as you had planned. The terse list is missing too much information about each record to be a good source of data.
- **[V]erbose list** - Displays on the screen all data fields for all records that match the search criteria, including information about the contact person.

You can save the terse and verbose listings to files on your computer. Since they are not automatically saved by the database or the NPS BBS, saving these search results to a file must be done by using functions in your telecommunications software program. Almost all such programs allow users to save to a file on disk all text that scrolls across the screen. If you turn on one of these log (or capture) files when you log on to the NPS BBS, then you will have a record of everything that happens in the session: bulletins, messages, file transfers, and search strategies and their results. You also can type comments to yourself at a Main Board, SIG Forum, or database prompt, which the NPS BBS and database will ignore as errors. The NPS BBS display is 24 rows by 80 columns, making it easy to print or edit the captured text via word processing. Refer to the NPS BBS user's manual, Chapter 3, Pre-Tour Preparation section, or the manual for your telecommunications software program to discover the combination of keystrokes that will open and close log/capture files for you.

If you are dialing in on a system that does not allow log/capture files, then you may be able to direct the screen output to your printer. First make sure the printer is turned on, is online, and has paper and ink/ribbon. Then tell your telecommunications software or operating system to direct screen output to the printer. Consult your software or system manuals for help.

Some search output is too wide or voluminous to display on an NPS BBS screen. If the results are from a single file search, a results list can be generated with the Wide file option in the Post-search Options Menu. You can preview the contents and sequence of a Wide file by viewing the verbose list on the screen first.

- **[W]ide file** - Generates a wide, tabular report and saves it as a zipped file that you can download from the "SIG Command?" prompt. (This option is not available for an all files or a contacts search.)

When you choose the Wide file, the program writes the information from the verbose listing into a file in a row-and-column format. If your listing is more than 50 records long (such as 50 documents or 50 bans and advisories), then using the Wide file option is faster than viewing a verbose list on the screen. This option also prevents line noise from corrupting your results list.

After prompting you for an eight-character name for your file, the program will place your zipped file in the SIG Forum's download directory. Remember or record the filename you created because the SIG Forum currently will not list it in an online file directory. (This problem is being studied.) Download your file by typing **D [eight-character filename].zip** at the "SIG Command?" prompt. You will have a month to download the file before the NPS BBS program deletes it from the system.

Note that as you download your results file (or any file) from the NPS BBS, you will be prompted by the NPS BBS program for the filename to send to your computer. Then you will be prompted again by the telecommunications software program on your system for the name of the file that is going to come in. It is a good idea to use the same filename each time since the name of the file may affect how it behaves. For example, zipped files cannot be unzipped on your system unless they end in **.ZIP**.

Other Post-Search Options

- **[H]elp** - Displays an explanation of the options at the current menu.
- **[Q]uit** - Erases all search and sort criteria, deselects all records, and returns to the Pre-search Menu.

Searching the Bans and Advisories Data File

What Each Searchable Data Field Contains

- **EPA Region** Entered as Arabic numbers (1-10).
- **State** Use the 2-letter postal code for searches - e.g., AK, VA, OK.
- **Waterbody** e.g., Mississippi River.
- **Geographic Extent** Brief text that describes which portion of the waterbody is covered by the ban or advisory - e.g., Smith County, Route 7 to the WV border, Cove of Bear Creek, 560 acres, tidal portion.
- **Pollutant** e.g., Pesticide, Chlordane.
- **Species** Species common name with size range or exceptions - e.g., catfish-bullhead > 20".
- **Population** Codes to describe the technical, demographic, or behavioral specifics of the ban or advisory, as listed in Appendix IV.

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See the SIG Forum bulletin list (before entering or after exiting the database) for a complete and current list of pollutant, species, and population codes used in this data file. Appendix IV contains the versions of these lists that were current at the time of publication. Appendix VI is a history of the origins of the information in the Bans and Advisories data file and the modifications made to the original data to display it in its current form in the Fish Consumption Database.

What Each Nonsearchable Data Field Contains

- Start Date Date ban or advisory started.
- End Date Date ban or advisory ended (if it is no longer in effect).
- Ban ID Code A unique alphanumeric code assigned to identify a particular ban or advisory. (A given ban or advisory may have many records in the data file, but all these records will show the same Ban ID Code.)
- Contact Person
 ID Code A unique alphanumeric code, assigned to each record, that identifies the person in the Contacts data file who can supply additional information about the ban or advisory. The program looks up this contact information automatically if it is available and includes it in the listings of the document data.

These fields cannot be searched, but the information in them will be displayed as part of a Verbose or Wide file results listing. The wide field output from a Bans and Advisories search is a table that should be printed on 14-inch paper in a 15- or 16-pitch font.

Searching the Documents Data File

The Documents data file contains information about documents related to risk assessment of fish consumption, including complete bibliographic data, keywords, brief abstracts, and a link to the Contacts data file to identify sources of documents.²

The Documents data file, as of this writing, is based on bibliographies from two projects. It is not purported to be a complete literature review on the topic of risk management of fish consumption. If you know of documents that should be added to the file, please contact the SIG Forum Technical Monitor.

What Each Searchable Data Field Contains

- Author(s) Complete names (if available) of all authors or of the responsible institution if authors are not named. Only the lead author is listed last name first. First names are spelled out, when possible.

²The U.S. EPA is not prepared to supply copies of documents listed in this database unless specifically named as the contact or publisher for particular documents. In general, it is best to contact the publisher for a document if contact information is not available.

- **Title** Title of article, journal, chapter, or book, with volume and issue numbers for articles and page ranges for articles and chapters.
- **Keywords** Terms that classify the document's contents, supplied by the author if possible. See the keyword list in Appendix III for a guide to the use of keywords in this database. Each discrete term in this data field ends with a period. To distinguish *CA* from *Carcinogen*, for example, type *CA.* as the Keyword search criterion. Common species names in these keywords were modified to match the common names in the Bans and Advisories data file. See Appendix VI for more information about species names.
- **Abstract** A brief summary open to a full text search.

When doing a search of the Documents data file, you should probably enter only one character string or word per data field. For example, typing the phrase **John Smith** for the Author data field would cause the program to miss any references to *John W. Smith* or *Smith, John*. You are better off using just the last name in the Author data field.

See the SIG Forum bulletin list (before entering or after exiting the database) for a complete and current list of keywords used in this data file. Appendix III contains the version of this list that was current at the time of publication.

What Each Nonsearchable Data Field Contains

- **Publication Date** Accurate to the year, month, or day.
- **Publisher or Agency Name** The original source institution, regardless of who is now supplying copies to the public.
- **NTIS or Other Publication ID Code** Document numbers or codes used by the publisher to catalogue each item published.
- **Document ID Code for this System** A unique alphanumeric code assigned to identify each record.
- **Check Date** Last date on which these data were known to be accurate.
- **Contact Person ID Code** A unique alphanumeric code that identifies the person in the Contacts data file who can supply copies of the document. The program looks up this contact information automatically if it is available and includes it in the listings of the document data.

These fields cannot be searched, but the information in them will be displayed as part of a Verbose or Wide file results listing. The terse listing for the documents also identifies the contact person. You can sort the listings on most of the nonsearchable data fields.

Fish Consumption Survey Data

Data about fish consumption surveys of various types are stored in the Documents data file, even if a report about the survey has not yet been published. Information about a survey could be included even if the survey is only in the planning stages. As of this writing, most of the records for consumption surveys are published reports.

For the surveys, the contents of the data fields in the Documents data file have been modified slightly:

- The Author field holds the names of the scientist(s) or agency conducting the survey.
- The Title field holds the name by which the survey is known.
- The Keywords field holds terms that summarize or classify the survey's characteristics, such as the location of the survey, the target population, and the type of survey. All consumption surveys have "survey-consumption" as a keyword. Other keywords for surveys are included in the main keyword list in Appendix III.
- The Abstract field holds a brief summary or explanation of information not conveyed by the other fields.
- The Publication Date field holds the actual or planned completion date.
- The Publisher field holds the name of the responsible, performing, or lead agency, regardless of who employs the scientist or the contact person.
- The NTIS or Other Publication ID Code field holds the project code if one is used.
- The Document ID Code for this System, the Check Date, and the Contact fields are used exactly as they are for regular documents.

Searching the Contacts Data File

What Each Searchable Data Field Contains

- EPA Region Entered as Arabic numbers (1-10). Contacts located in Washington, DC, and connected to the federal government have "HQ" in the Region field.
- State Use the 2-letter postal code for searches - e.g., AK, VA, OK.
- Last name If the contact is an organization, then this field usually holds the organization's acronym.
- First name

What Each Nonsearchable Data Field Contains

- Contact Person ID Code A unique alphanumeric code assigned to each contact person.
- Courtesy title e.g., Dr.
- Job Title, Company, Department
- Address
- Area Code and Telephone Number(s)
- FaxNumber
- Check Date Last date on which the contact data were known to be accurate.

These fields cannot be searched, but the information in them will be displayed as part of a Verbose results listing. No Wide file reports are available for the Contact data file.

Searching All Data Files

An All Files search allows you to search for character strings, words, or phrases in all data fields (except data fields containing dates) of all three data files simultaneously. This is the only type of search that allows you to narrow your search by searching for two or more criteria that fall in the same data field (see the example regarding *lead* and *chromium* below.)

An All Files search is the slowest type of search, but it is thorough and flexible. For example, searching for *lead* will select bans and advisories based on lead AND documents that mention lead anywhere in the data files. Searching for *Smith* could select a ban for Smith Mountain Lake, a document written by John Smith, and contact persons named Smith.

The structure of the All Files search logic is very similar to that of single file searches. Rather than entering criteria for specific data fields, however, you enter criteria into five blanks with no data field labels.

Thus, you can build searches of multiple criteria that could occur in any field or the same field. For example, a search for *lead* and *chromium* could be appended to a search for *dioxin* and *PCB* using the Add option. The result would be a combined list of some records that deal with both lead and chromium and other records that deal with both dioxin and PCB.

When doing an All Files search, you should probably enter only one character string or word per blank line. For example, typing the phrase *John Smith* on one line would cause the program to miss any references to *John W. Smith* or *Smith, John*. You are better off using just the last name.

No Wide file reports are available for All Files searches. The Sort option in the Post-search Options Menu allows you to sequence independently the records found in each of the data files.

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Data Quality

Although all information stored in the Fish Consumption Database has been carefully checked, it might contain errors. User participation is essential to the quality and continuing utility of this database and all the other information in the SIG Forum. Without feedback from users like you, the data will become out-of-date and useless.

To warn users of out-of-date data, all Verbose listings contain a check date. This date is the last date on which the accuracy of the item was confirmed by someone in a position to know. This knowledgeable person could be a designated state contact, a federal official, an academic researcher — or you! If you see errors in the database or want EPA to add new information, please send an online message to the SIG Forum Technical Monitor. (See Appendix II or SIG Forum Bulletin 1 online for the name of the current SIG Forum Technical Monitor.) Complete references to information sources are greatly appreciated.

6. Submitting Revisions and Additions

Data Changes and Additions

Changes and additions to the Fish Consumption Database can be suggested by any SIG Forum user. Suggested changes can be submitted to the SIG Forum Technical Monitor, who will review the data, check the source, verify the accuracy of the data, and then add the data to the database during a periodic update. SIG Forum users cannot update the database directly.

The file DATAFORM.ZIP in File Directory 1 of the SIG Forum contains blank forms for submitting additions or changes for all three data files. The forms list all the data fields in the data files and are intended to ease your submission of complete data. After you download this file to your system and unzip it, you can copy the blank forms to another file on your disk, complete them in a word processor, and upload the completed file to the Technical Monitor. (See Appendix II or SIG Forum Bulletin 1 online for the name of the current SIG Forum Technical Monitor.)

Paper copies of the forms, which can be copied, filled out, and mailed to the Technical Monitor, are included in Appendix V. Informal data messages can be sent to the Technical Monitor by the regular SIG Forum message system.

If you keep track of your bans, advisories, or related documents in a computer database, then you may be able to donate files that could be directly incorporated into the Fish Consumption Database with relatively little effort. Please contact the Technical Monitor if you might be able to participate in this manner.

If you or your colleagues write or use reports that could be included in this database, please send your bibliographies on paper or in ASCII-format files to the SIG Forum Technical Monitor. You also can upload ASCII-format files of your own reports for distribution via the SIG Forum.

Software Bugs

The software for the Fish Consumption Database probably contains bugs. It has passed quality control tests, but a creative user like you could enter some combination of keystrokes that evades the program's logic and error-handling protocols.

Programmers can't fix such problems unless they know about them. If the database program seems to function poorly or if it freezes up completely,³ please leave a comment to the Sysop by typing C at the "SIG Forum Command?" prompt.

³The only time you should hang up without logging off is when a door program freezes and you have no other way out. If you have this problem, please phone the Sysop, using the telephone number in Appendix II, and ask him or her to manually unfreeze the phone line.

The more information you can include about the problem, the better. If you can, jot down immediately the series of keystrokes and events that led to the error and any error message that the program displayed. If a log/capture file was not on when the problem occurred, try to repeat the error with a log/capture file turned on. Then send a comment about the problem to the Sysop (type C at the "SIG Command?" prompt). Also, please upload your log file because the Sysop and programmers may need to see it.

Appendix I NPS BBS Commands—Alphabetical Listing

- [A]bandon a SIG Forum** Exits the current Special Interest Group (SIG) Forum, if you're in one, and returns you to the Main Board Menu.
- Subcommands: None
- [B]ulletin Listings** Displays a menu of bulletins.
- Subcommands: # A D N R S NS
- # (e.g., B 1) selects a bulletin number to read, etc;
 A displays all bulletins;
 D enters download mode to download selected bulletin(s);
 N displays all new bulletins since you last logged on;
 R re-displays the bulletin menu;
 S searches for text in selected bulletins (#) or in all (A) bulletins.
 NS displays selected bulletin non-stop.
- [BYE]** Logs off and hangs up the phone. (Same as command G Y).
- Subcommands: None
- [CHAT] with Other Users** Allows you to communicate directly with other callers who are logged on through other phone lines (called nodes).
- Subcommands: # G A U
- # begins CHAT with person indicated by node number(#);
 G initiates a group CHAT;
 A announces your own node as available for CHAT;
 U announces your own node as unavailable for CHAT.
 (Use postcommand Q/E to quit CHAT).
- [C]omment to Sysop** Allows you to leave a private message to the Sysop (SYStem OPerator).
- Subcommands: None

[D]ownload a File

Allows you to retrieve a file from the NPS BBS to your computer.

Subcommands: "filename" "protocol"

filename filename for download used on command line (DOS wildcards permitted);
protocol sets transfer protocol.

[DB] Download Batch

Allows you to download several files, prompting you to add a second filename to the command line.

Subcommands: "filenames" "protocol"

filenames filenames for download (DOS wildcards permitted);
protocol sets transfer protocol.

[E]nter a Message

Allows you to leave a message for another user or other users. After entering a message, you may hit <ESC> to access postcommands. If <ESC> won't work on your systems to display the postcommands, press <CTRL> U instead. (See Appendix III of the NPS BBS user's manual for more Full Screen Editor Control Key commands.)

Postcommands: A C D E F H I L Q S U

A aborts the message entry and returns to Main Board Menu;
C continues the message;
D Delete—prompts user for line number in message to delete;
E Edit—requests line number in message to edit;
F Selects full-screen editing rather than line-by-line editing;
H displays help information;
I Insert—prompts user for line number and text to insert;
L List—re-displays current message in line-by-line mode;
Q helps display, copy, and move parts of an original message into a reply (see REPLY command);
S saves the message;
U uploads to a remote editor.

[F]ile Directories Describes directories from which files may be downloaded. Files new to caller are displayed with asterisk.

Subcommands: # D L N R U V Z NS

displays a directory list for the directory with that number;
D prompts user for file to download;
L locates a file among several directories;
N locates a file by date;
R re-lists menu of available directories;
U displays files in upload directories;
V view—displays contents of a file;
Z Zippy search—searches all directory files for specified text;
NS Displays file in non-stop mode.

[FLAG] for Download Allows you to mark a file for future downloading.

Subcommands: "filename"

filename name of file you want to mark.

[G]oodbye Begins log-off sequence. Prompts user with *Proceed With Log-off? Yes or No*. An answer of **Y** completes the log-off and phone hang-up; **N** leaves user connected to the NPS BBS. (Command **BYE** combines the commands **G Y**).

Subcommands: None

[H]elp Displays context-sensitive help on any command in the menu.

Subcommands: "command name"

command name command for which user requires additional information.

[I]nitial Welcome Displays the original welcome screen.

Subcommands: None

[J]oin a SIG Forum

Displays a menu of Special Interest Group (SIG) Forum areas and allows you to join one.

Subcommands: # "name"

number of SIG Forum you want to join;
name name of SIG Forum you want to join;
(Postcommand **Q** allows you to bypass the news when entering a SIG Forum)
(Postcommand **J,Main** will exit the SIG Forum you're in and return you to the Main Board).

[K]ill a Message

Deletes a message from the system.

Subcommands: "message number"

message # number of message to be deleted.

[L]ocate File(s)

Allows you to scan the file download directories for a filename.

Subcommands: "filename"r# A D N U NS

filename file you are seeking (DOS wildcards allowed);
specifies the number (#) of the directory to search;
A searches all available files within a SIG Forum;
D used to flag a specified file for download;
N scans only for files dated after a specified date;
U searches in all upload directories;
NS files displayed in non-stop mode.

[MENU]

Redisplays the Main Board Menu one time.

Subcommands: None

[M]ode Graphics

Changes to or from graphics mode depending on your current setting. (To use graphics mode, you must have installed the ANSI.SYS driver, which comes with PC-DOS.)

Subcommands: CTTY ANSI GRAPHICS

CTTY places system in non-graphics, non-ANSI mode;
ANSI places system in non-graphics, ANSI mode;
GRAPHICS places system in graphics, ANSI mode.

[N]ew Files (date) Locates any files uploaded to the NPS BBS since the specified date.

Subcommands: "date"e# A D S U NS

date date to begin a search for new files using MMDDYY format;
a number of a directory to search (if you want to limit the search);
A searches all post-dated files in all directories;
D marks all queued files for download;
S scans most recent files;
U searches upload directories;
NS displays files in non-stop mode.

[NEWS] Screen Display Displays news in the current Special Interest Group (SIG) Forums.

Subcommands: None

[OPEN] a Door Allows you to temporarily "exit" PCBoard (the NPS BBS software) to run an online application program such as a database.

Subcommands: # "name"

number of door to open;
name name of door to open.

[P]age Length Allows user to specify the number of lines displayed on screen.

Subcommands: #

number of lines displayed per screen.

[Q]uick Message Scan

Scans all public messages for number and subject.

Subcommands: # F Y S NS + - TS USER

- # message number from which to start the scan;
- F locates all messages left by you;
- Y locates all messages sent to you;
- S displays all messages that you have not already read;
- NS displays messages in non-stop mode;
- + when appended to "#" displays messages in forward-numerical order;
- when appended to "#" displays messages in reverse-numerical order;
- TS scans message text as well as header but displays only header;
- USER locates all messages left for or received from an indicated caller.

[R]ead a Message

Allows you to read messages.

Scanning Subcommands: # F Y YA S L A ALL TS USER SKIP JUMP SELECT DESELECT

- # indicates the message number to read;
- F From—scans messages left by you for other(s);
- Y Your—scans messages sent to you;
- YA Yours/All—scans messages sent to you or to all users;
- S Since—scans and displays all messages not already read;
- L Last—reads messages backwards starting from the most recent;
- A reads messages from all selected Special Interest Group (SIG) Forums;
- All reads messages from all SIG Forums;
- TS scans header of each message for indicated text;
- USER scans for messages left to or received from an indicated user;
- SKIP skips remaining messages in current SIG Forum— usually used after R A or R S command;
- JUMP jumps to next SIG Forum to continue message reading;
- SELECT selects a particular SIG Forum for future message scanning;
- DESELECT deselects a particular SIG Forum for bypassing during future message base scanning.

Display Subcommands: NS NEXT PREV RM RM+ RM- + - /

- NS** displays messages in non-stop mode;
- NEXT** displays next numerical message;
- PREV** displays previous numerical message;
- RM** re-displays the last read message;
- RM+** re-displays the last read message and places message base in forward mode for further reading;
- RM-** re-displays the last read message and places message base in reverse mode for further reading;
- +** when appended to a message number(#), displays all messages in forward-numerical order;
- when appended to a message number(#), displays all messages in reverse-numerical order;
- /** re-displays current message.

Capturing Subcommands: C D Z

- C** Capture—messages displayed by current command are placed in a file and prepared for download;
- D** messages displayed by current command are placed in a file and immediately downloaded;
- Z** same as subcommand **D** except the file is compressed (zipped) before being downloaded.

General Subcommands: EDIT

EDIT places the current message in the editor for modification.

Postcommands: RE RR M T T- K N

- RE** allows you to reply to the current message;
- RR** immediately accesses the reference message if the current message is a reply;
- M** invokes a pointer at the current message to make it easier to return to that message at a later time; (See [RM] Re-Read Memorized Message command.)
- T** scans forward, and **T-** scans backward, through all messages that have a subject identical to that of current message;
- K** deletes or kills a current message to or from you;
- N** ends message reading without exiting the NPS BBS.

- [REPLY]** to Message(s) Allows you to reply to a message using all commands available under **[E]nter a Message**. (You may reply to a message while in **[R]ead a Message** command—See **RE** postcommand under **[R]ead a Message**.)
- Subcommands: #
- # The number of the message to which you would like to respond.
- Quoting: <ESC> Q, when used during a reply, initiates a series of prompts that help you display, copy, and move designated parts of the original message using the line-by-line editor; **CTRL Q** performs the same function as the Q command, using the full-screen editor rather than line-by-line editor.
- [RM]** Re-Read M Message If you marked a message with a pointer (**M** subcommand under **[R]ead a Message**) while you were reading your messages, you may recall it with this command.
- Subcommands: None
- [S]**cript Questionnaire Displays a list of questionnaires available for you to complete.
- Subcommands: None
- [SELECT]** SIG Forums for Scan Lists the Special Interest Groups to which you have access for scanning or reading your mail (messages).
- Subcommands: S # D Q
- S selects all SIG Forums for scanning by placing "X" in each SIG Forum flag field;
- # deselects a SIG Forum that has an "X" flag (removes the "X");
- D deselects all SIG Forums for scanning (removes all "X" flags);
- Q Quit—returns you to the Main User Menu.
- [T]**ransfer Protocol Displays a list of communications protocols for uploading or downloading files.
- Subcommands: letter or number of protocol in menu

[TEST] a File

Checks a file for possible viruses or other corruptions.

Subcommands: "filename"

filename name of file to be tested.

[TS] Text Search Msgs.

Allows you to scan text and headers of messages to locate specified text.

Subcommands: F Y S A ALL L C D Z NS RM+ RM- #+ #- USER | &

- F** uses specified text string to scan all messages left by you;
- Y** uses specified text string to scan all messages left for you;
- S** displays all messages not already read that contain specified text string;
- A** scans all selected SIG Forums for the text string;
- ALL** scans all SIG Forums, whether selected or not, for the text string;
- L** reads current message base backward, last message to first;
- C** displayed messages are placed in a file and prepared for download to your computer;
- D** displayed messages are placed in a file and downloaded;
- Z** provides same function as subcommand **D** except that it compresses (zips) the file;
- NS** displays messages in non-stop mode;
- RM+** re-displays last message and puts message base in forward mode;
- RM-** re-displays last message and puts message base in reverse mode;
- #+** scans message base for specified text from this point forward;
- #-** scans message base for specified text from this point backward;
- USER** displays messages with specified text left to or received from indicated user;
- |** Boolean *OR* operand that when placed in text locates either first or second text string or both;
- &** Boolean *AND* operand that when placed in text locates both the first and second text strings.

[U]upload a File

Allows you to upload, or transfer, a file to the NPS BBS.

Subcommands: "filename" "protocol"

filename DOS name of file to be uploaded;
protocol selects a transfer protocol.

[UB] Upload Batch Similar to the [U]pload command, but UB assumes that more than one file will be uploaded and prompts you for each filename.

Subcommands: "filenames" "protocol"

filename(s) DOS name of file to be uploaded;
protocol transfer protocol for the batch.

[USERS] List Users Allows you to use a text string to search the current user's file for a name, location, or last log-on date.

Subcommands: "text string" | &

text string scans and displays all user records with the appropriate text;

| Boolean *OR* operand that when placed in text (John|Utah) locates either first or second text string or both;

& Boolean *AND* operand that when placed in text locates both the first and second text strings.

[V]iew Settings Displays your current NPS BBS settings including, for example, your last date on the NPS BBS, security level, and active messages.

Subcommands: None

[WHO] Displays the CHAT status of each node (phone line), but does not permit communication with another node. (See CHAT command to communicate with other callers.)

Subcommands: None

[W]rite User Information Allows you to change your password, address, phone number, full-screen editor default (on/off/ask), or Special Interest Groups for scanning.

Subcommands: None

[X]pert Mode On/Off Allows you to toggle between expert and novice modes. Expert mode suppresses the menus and provides abbreviated command prompts. (See [MENU] command.)

Subcommands: None

[Y]our Personal Mail

Scans the entire message base for mail addressed to you or left by you.

Subcommands: A ALL S NS Q L C + -

- A scans all selected SIG Forums including Main Board;
- ALL scans the entire board including all SIG Forums;
- S scans only those messages since the last message read;
- NS displays messages non-stop;
- Q displays only the total number of personal messages found in the message base(s);
- L scans and displays number of each personal message found in message base(s);
- C scans only the current message base;
- + when added to a message number, scans from that point forward;
- when added to a message number, scans from that point backward.

[Z]ippy Directory Scan

Allows you to scan the file download directories for a matching text entry of your choice.

Subcommands: # A D N U NS | &

- # number of a directory to be scanned;
- A scans for text string in all directories;
- D flags each file found with matching text for download;
- N scans for matching text only in files created after a user-specified date;
- U scans only upload directories for matching text;
- NS displays screen output non stop;
- | Boolean *OR* operand that when placed in text (John|Utah) locates either first or second text string or both;
- & Boolean *AND* operand that when placed in text locates both the first and second text strings.

Appendix II Information Sources*

For information about materials found in the SIG Forum files, bulletins, and messages; the data in the Fish Consumption Database; and scientific and regulatory issues related to fish consumption, call:

TECHNICAL MONITOR: Alison Greene
(202) 260-7053
Fax (202) 260-7024
U.S. Environmental Protection Agency
Risk Assessment Management Branch

Please address all correspondence to:

Alison Greene
U.S. Environmental Protection Agency
Risk Assessment Management Branch
(WH-585)
401 M Street, SW
Washington, DC 20460

For technical assistance related to accessing the NPS BBS, or using Main Board or SIG Forum functions other than the Fish Consumption Database, call:

SYSOP: Beth Ann Kyle
Environmental Management Support, Inc.
1010 Wayne Avenue, Suite 200
Silver Spring, MD 20910
(301) 589-5318
Fax (301) 589-8487

* As of February 28, 1992.

Appendix III Keyword List for Documents Data File*

Unless otherwise noted, these terms and phrases are used in their usual sense. All the keywords in this list occur in at least one document. Words not on this keyword list will not be found unless they are a fragment of a listed keyword or have been added to the database after this writing. A current listing of keywords will be posted regularly as Bulletin 2 in the SIG Forum.

AK: Alaska	Chemistry
Activity patterns: of people	Chesapeake Bay
Aldrin	Chlorinated
Ammonia	Chlorophyll a
Analytical chemistry	Chromium
Angler opinion leaders	Clean Air Act
Antimony	Clean Water Act
Aquatic	Coastal
Arroyo Colorado	Cod
Arsenic	Color
Atlantic	Columbia River
BOD: Biochemical Oxygen Demand	Commencement Bay
Bacteria-enterococcus	Commercial fishing
Bacteria-fecal coliform	Communications
Bacteria-total	Consumption
Bass-smallmouth: Centrarchidae	Consumption rates
Beliefs: Opinions	Conventional pollutants
Benthic Surveillance Project	Copper
Bibliographic	Crappie: Centrarchidae
Bioaccumulation	Croaker-white
Biota	DCPA (dacthal)
Bluefish	DDE: 2,2'-bis-(p-chlorophenyl)-1, 1-dichloroethylene
Body weight	DDT: Dichloro diphenyl trichloroethane
Butadienes	DO (Probe method): Dissolved oxygen
Buzzards Bay	DO (Winkler method): Dissolved oxygen
CA: California	Databases
CERCLA: Comprehensive Environmental Response, Compensation, and Liability Act (Superfund)	Decision-making
COD: Chemical oxygen demand	Demographics
CSOs: Combined Sewer Overflows	Depuration
Cadmium	Dermal
Canada	Detection limits
Carcinogenic Potency Factors	Diary
Carcinogens	Dieldrin
Catfish: Ictaluridae	Dillman method
Catfish-white: Ictaluridae	Dioxins
Chemical mixtures	Discovery Bay: WA
	Dose

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Dose-response	Hazardous waste
Drinking water	Health
Dust	Health advisory-drinking water
EDC: Ethylene dichloride, 1,2-Dichloride	Health advisory-fish consumption
Ecological risk	Health care experts
Ecology	Hepatopancreas: liver-like organ in megainvertebrates
Economics	Heptachlor
Eel-american	Histology
Effluent	Household income
Elliott Bay	Hudson River
Endosulfan	Human anatomy
Endrin	Human resources
Enforcement: of laws and regulations	Hydrocarbons
Estuary	Hydrocarbons-aromatic
Ethers	Hydrocarbons-halogenated
Eulachon or smelt	IRIS: Integrated Risk Information System
Exposure assessment	Industrial sources
FL: Florida	Infauna: Animals in sediment
Families	Ingestion
Fate	Inhalation
Fish	Inorganics
Fish (liver)	Kepone
Fish size	Laboratory analysis
Fish-bottom: Dwelling near the bottom	Laguna Madre
Fish-sport	Lake Huron
Fisheries experts	Lake Ontario
Fisherman-licensed	Lead
Fishermen-commercial	Lifetime
Fishermen-recreational	Lindane
Fishermen-subsistence	Liver
Fishery management	Loading: Mass loading of pollutants or other model parameters
Flatfish	Lower Tittawabassee River
Floating particulates	MA: Massachusetts
Flow	MD: Maryland
Flushing time	ME: Maine
Foods	MI: Michigan
Furans: with congeners and homologues	Mapping
General population	Meal size
Georgian Bay	Megainvertebrates
Grain size	Menhaden-atlantic
Great Lakes	Menhaden-gulf
Ground water	Mercury
Gulf of Mexico	Metabolism
HCB: Hexachlorobenzene	Metalloids
HI: Hawaii	Metals
Halibut	Methodology
Halogenated	

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Methoxychlor	Phthalates
Mirex	Phytoplankton
Modelling	Pica
Monitoring	Priority pollutant metals
Mother's milk	Priority pollutant organics
Multimedia	Priority pollutants
Muscle	Public awareness
Mussel watch project	Puget Sound
Mutagens	QA: Quality Assurance
NC: North Carolina	RI: Rhode Island
NJ: New Jersey	Radiation
NOD: Nitrogenous Oxygen Demand	Rainfall
NPDES: National Pollution Discharge Elimination System	Regulations
NPSs: Nonpoint Sources	Reproduction: effects on, in humans and biota
NSTP: National Status and Trends Program	Research needs
NY: New York	Review: Literature review on the other keyword topics
Native American Treaty Fishing	RfD: Reference Dose
Neurotoxins	Risk assessment
New England	Risk management
Newark Bay: NJ	SARA: Superfund Ammendments and Reauthorization Act of 1986
Nickel	SC: South Carolina
Nitrate-nitrite	Salinity
Nitrogen	Salmon-chinook
Nitrogen (total Kjeldahl)	Salmon-coho
Nitrosamines	Salmon-pink
Noncarcinogenic effects	Sampling
Nutrients	San Francisco Bay
OR: Oregon	Sanddab-pacific: Pacific Sanddab
Ocean	Scorpion fish
Oil and grease	Seafood
Ontario: Canada	Section 301(h)
Organics	Sediment
Organophosphates	Selenium
PAHs: Polycyclic aromatic hydrocarbons	Settleable solids
PCBs: Polychlorinated biphenyls	Sewage
PCP: Pentachlorophenol	Shad-american
pH	Shellfish
Pacific	Shellfish-bivalves
Palos Verdes Shelf	Shellfish-bivalves-mussels
Panfish	Shellfish-crab (muscle)
Pelagic	Shellfish-crab-blue
Perch	Shellfish-crab-dungeness
Pesticides	Shellfish-crab-japanese red rock
Petroleum	Software
Phenols	Soil
Phosphorus (total)	

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Sole-dover
 Sources
 Spatial
 Statistics
 Striped bass
 Sturgeon-green
 Sturgeon-white
 Sulfides
 Sunfish: Centrarchidae, Lepomis spp.
 Sunfish-bluegill: Centrarchidae, Lepomis macrochirus

 Superfund
 Surface water
 Survey-consumption
 Survey-creel
 Survey-diary
 Survey-interview
 Survey-mail
 Survey-recall
 Survey-telephone
 Systemic effects
 TOC: Total organic carbon
 TSS: Total Suspended Solids
 TVS: Total Volatile Solids
 TX: Texas
 Target species
 Temperature
 Temporal
 Teratogens
 Terrestrial
 Thallium
 Thermal pollution
 Tin
 Total chlorine residual
 Total solids/water content
 Tournament fishing
 Toxaphene
 Toxicology
 Transformation: of chemical contaminants
 Transparency
 Transport
 Trout-brown
 Trout-lake
 Trout-rainbow
 Trout-steelhead
 Turbidity
 Uncertainty analysis
 Upper Bay: NJ

 Urban sources
 VA: Virginia
 VOCs: Volatile Organic Compounds
 Volatilization
 WA: Washington
 WI: Wisconsin
 Walleye
 White perch
 Worker: risks to
 Workers-migrant farm
 Zinc

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Appendix IV Species, Pollutant, and Target Human Population Terms Used in the Bans and Advisories Data File*

This appendix contains the species, pollutant, and target human population terms used in the Bans and Advisories data file. These terms are presented in four lists:

- Species and taxon sorted by species
- Taxon and species sorted by taxon
- Pollutants
- Populations

Species and Taxon Sorted by Species

The following is a list of species common names for the Fish Consumption Database, with taxonomic family and/or notes. Hyphens show taxonomic hierarchy, down from left to right. Tissues are in parentheses.

Species Common Name (hierarchical)	Taxinomic Family/Notes
(liver)	---
bass-hybrid	centrarchidae?
bass-largemouth	centrarchidae
bass-largemouth 10-12"	centrarchidae
bass-largemouth 10-15"	centrarchidae
bass-largemouth 10-18"	centrarchidae
bass-largemouth 12-15"	centrarchidae
bass-largemouth 12-18"	centrarchidae
bass-largemouth 12-22"	centrarchidae
bass-largemouth 15-18"	centrarchidae
bass-largemouth 15-20"	centrarchidae
bass-largemouth 15-22"	centrarchidae
bass-largemouth 18-22"	centrarchidae
bass-largemouth < 10"	centrarchidae
bass-largemouth < 12"	centrarchidae
bass-largemouth < 15	centrarchidae
bass-largemouth < 15"	centrarchidae
bass-largemouth < 18	centrarchidae
bass-largemouth < 20"	centrarchidae
bass-largemouth > 14"	centrarchidae
bass-largemouth > 15"	centrarchidae
bass-largemouth > 2 lb	centrarchidae
bass-rock	centrarchidae

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Species Common Name (hierarchical)	Taxinomic Family/Notes
bass-rock < 10"	centrarchidae
bass-rock < 15"	centrarchidae
bass-rock > 8"	centrarchidae
bass-smallmouth	centrarchidae
bass-smallmouth 10-18"	centrarchidae
bass-smallmouth 12-15"	centrarchidae
bass-smallmouth 12-18"	centrarchidae
bass-smallmouth 15-20"	centrarchidae
bass-smallmouth 15-22"	centrarchidae
bass-smallmouth 18-22"	centrarchidae
bass-smallmouth < 10	centrarchidae
bass-smallmouth < 12	centrarchidae
bass-smallmouth < 15	centrarchidae
bass-smallmouth < 15"	centrarchidae
bass-smallmouth < 18	centrarchidae
bass-smallmouth < 20	centrarchidae
bass-smallmouth > 16	centrarchidae
bass-smallmouth > 18	centrarchidae
bluefish	pomatomidae
bluefish > 25"	pomatomidae
buffalo	catostomidae
buffalo < 30"	catostomidae
buffalo > 18"	catostomidae
buffalo > 20"	catostomidae
buffalo > 23"	catostomidae
buffalo-bigmouth	catostomidae
buffalo-largemouth	catostomidae
buffalo-smallmouth	catostomidae
buffalo-smallmouth 15-20"	catostomidae
carp	cyprinidae
carp 20-25"	cyprinidae
carp 20-30"	cyprinidae
carp < 15"	cyprinidae
carp < 30"	cyprinidae
carp > 15"	cyprinidae
carp > 17"	cyprinidae
carp > 21"	cyprinidae
carp > 22"	cyprinidae
carp > 24"	cyprinidae
carp > 26"	cyprinidae
carpsucker	catostomidae
carpsucker > 18"	catostomidae
carpsucker-quillback	catostomidae
carpsucker-quillback < 15"	catostomidae
catfish	ictaluridae
catfish (filet)	ictaluridae
catfish 15-20"	ictaluridae

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Species Common Name (hierarchical)	Taxinomic Family/Notes
catfish 25-30"	ictaluridae
catfish < 20"	ictaluridae
catfish > 15"	ictaluridae
catfish > 22"	ictaluridae
catfish-bullhead	ictaluridae
catfish-bullhead-black < 15"	ictaluridae
catfish-bullhead-brown	ictaluridae
catfish-bullhead-brown > 14"	ictaluridae
catfish-channel	ictaluridae
catfish-channel 16-23"	ictaluridae
catfish-channel 21-23"	ictaluridae
catfish-channel 21-25"	ictaluridae
catfish-channel > 15	ictaluridae
catfish-channel > 23"	ictaluridae
catfish-channel > 24	ictaluridae
catfish-channel > 25	ictaluridae
catfish-channel > 26	ictaluridae
catfish-flathead	ictaluridae
catfish-flathead 22-30"	ictaluridae
catfish-flathead > 16"	ictaluridae
catfish-flathead > 26"	ictaluridae
catfish-flathead > 30"	ictaluridae
catfish-white	ictaluridae
ciscowet	salmonidae
ciscowet > 15"	salmonidae
corvina	sciaenidae
corvina-orangemouth	sciaenidae
crappie	centrarchidae
crappie > 9"	centrarchidae
crappie-black	centrarchidae
crappie-black 10-12"	centrarchidae
crappie-black 12-15"	centrarchidae
crappie-black < 10"	centrarchidae
crappie-black < 12"	centrarchidae
crappie-black < 15"	centrarchidae
croaker	sciaenidae
croaker-white	sciaenidae
drum	sciaenidae
drum-freshwater > 12"	sciaenidae
drum-freshwater > 14"	sciaenidae
eel	anguillidae
eel-american	anguillidae
fish	---
fish > 21"	---
fish > 3 lb	---
fish except banned species	---
fish except herring, shad, & shellfish	---

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Species Common Name (hierarchical)	Taxinomic Family/Notes
fish except panfish	---
fish except salmon & trout-lake > 24"	---
fish except trout-brown & eel-american	---
fish-bottom	---
fish-sport	---
fish-sport: local except croaker-white	---
flounder	pleuronectidae
goldfish	cyprinidae
muskellunge	esocidae
muskellunge 20-25"	esocidae
muskellunge > 30"	esocidae
muskellunge-tiger	esocidae
needlefish-atlantic	belonidae
paddlefish	polyodontidae
paddlefish (eggs)	polyodontidae
perch	percidae
perch-yellow	percidae
perch-yellow 10-12"	percidae
perch-yellow 10-15"	percidae
perch-yellow 12-15"	percidae
perch-yellow < 10"	percidae
perch-yellow < 12"	percidae
perch-yellow < 15"	percidae
perch-yellow > 10"	percidae
pike-northern	esocidae
pike-northern 15-18"	esocidae
pike-northern 15-20"	esocidae
pike-northern 15-25"	esocidae
pike-northern 15-30"	esocidae
pike-northern 18-26"	esocidae
pike-northern 18-30"	esocidae
pike-northern 20-25"	esocidae
pike-northern 20-30"	esocidae
pike-northern 22-26"	esocidae
pike-northern 22-30"	esocidae
pike-northern 25-30"	esocidae
pike-northern 26-30"	esocidae
pike-northern < 15"	esocidae
pike-northern < 18"	esocidae
pike-northern < 22"	esocidae
pike-northern < 26"	esocidae
pike-northern < 30"	esocidae
pike-northern > 15"	esocidae
pike-northern > 20"	esocidae
pike-northern > 22"	esocidae

Species Common Name (hierarchical)	Taxonomic Family/Notes
pike-northern > 23"	esocidae
pike-northern > 25"	esocidae
pike-northern > 26"	esocidae
pike-northern > 28"	esocidae
pike-northern > 30"	esocidae
redhorse	catostomidae
redhorse 15-20"	catostomidae
redhorse < 25"	catostomidae
redhorse-shorthead 15-20"	catostomidae
redhorse-silver	catostomidae
redhorse-silver 15-20"	catostomidae
redhorse-silver 20-25"	catostomidae
salmon-chinook	salmonidae
salmon-chinook 21-23"	salmonidae
salmon-chinook 21-32"	salmonidae
salmon-chinook > 21"	salmonidae
salmon-chinook > 25"	salmonidae
salmon-chinook > 32"	salmonidae
salmon-coho > 21"	salmonidae
salmon-coho > 26"	salmonidae
sargo	pomadasyidae
sauger	percidae
sauger < 15"	percidae
scup	sparidae
sea trout-speckled	sciaenidae
sea trout-white	sciaenidae
seafood	---
shad-gizzard > 10"	clupeidae
shellfish	mollusca or crustacea
shellfish-bivalves	mollusca
shellfish-bivalves-mussel	mollusca
shellfish-crab-blue	decapoda
shellfish-crab-blue (hepatopancreas)	decapoda
shellfish-lobster	decapoda
shellfish-lobster (tomale)	decapoda
smelt-rainbow	osmeridae
squawfish	cyprinidae
striped bass	percichthyidae
striped bass & white bass hybrid	percichthyidae
sturgeon	acipenseridae
sturgeon (eggs) [shovelnose?]	acipenseridae
sturgeon > 50"	acipenseridae
sturgeon-lake	acipenseridae
sturgeon-shovelnose	acipenseridae
sturgeon-shovelnose (eggs)	acipenseridae

Species Common Name (hierarchical)	Taxonomic Family/Notes
sucker	catostomidae
sucker < 25"	catostomidae
sucker-longnose > 16"	catostomidae
sucker-white	catostomidae
sucker-white 15-20"	catostomidae
sucker-white 15-25"	catostomidae
sucker-white 20-25"	catostomidae
sucker-white < 15"	catostomidae
sucker-white < 15-20"??	catostomidae
sunfish-bluegill	centrarchidae
sunfish-bluegill < 10"	centrarchidae
sunfish-bluegill < 15"	centrarchidae
sunfish-bluegill > 8"	centrarchidae
sunfish-green	centrarchidae
sunfish-pumpkinseed	centrarchidae
tautog	labridae
tilapia	cichlidae
trout	salmonidae
trout > 25"	salmonidae
trout-brook	salmonidae
trout-brook < 15"	salmonidae
trout-brook < 20"	salmonidae
trout-brook > 15"	salmonidae
trout-brown	salmonidae
trout-brown < 20"	salmonidae
trout-brown < 21"	salmonidae
trout-brown < 23"	salmonidae
trout-brown > 12"	salmonidae
trout-brown > 20"	salmonidae
trout-brown > 21"	salmonidae
trout-brown > 23"	salmonidae
trout-lake	salmonidae
trout-lake 15-20"	salmonidae
trout-lake 15-25"	salmonidae
trout-lake 15-30"	salmonidae
trout-lake 20-23"	salmonidae
trout-lake 20-25"	salmonidae
trout-lake 20-30"	salmonidae
trout-lake 25-30"	salmonidae
trout-lake < 25"	salmonidae
trout-lake < 30"	salmonidae
trout-lake > 21"	salmonidae
trout-lake > 23"	salmonidae
trout-lake > 24"	salmonidae
trout-lake > 25"	salmonidae

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Species Common Name (hierarchical)	Taxonomic Family/Notes
trout-lake > 30"	salmonidae
trout-lake > 32"	salmonidae
trout-rainbow	salmonidae
trout-rainbow 15-20"	salmonidae
trout-rainbow < 15"	salmonidae
trout-rainbow < 21"	salmonidae
trout-rainbow > 22"	salmonidae
trout-rainbow > 25"	salmonidae
trout-splake	salmonidae
trout-splake < 16"	salmonidae
trout-splake < 20"	salmonidae
trout-splake > 12"	salmonidae
trout-splake > 16"	salmonidae
tullibee < 15"	salmonidae
turtle-snapping < 15	testudines-cryptodira-chelydridae
walleye	percidae
walleye 10-15"	percidae
walleye 10-30"	percidae
walleye 12-15"	percidae
walleye 12-18"	percidae
walleye 12-22"	percidae
walleye 15-18"	percidae
walleye 15-20"	percidae
walleye 15-22"	percidae
walleye 15-25"	percidae
walleye 15-26"	percidae
walleye 15-30"	percidae
walleye 18-22"	percidae
walleye 18-26"	percidae
walleye 18-30"	percidae
walleye 20-25"	percidae
walleye 20-30"	percidae
walleye 22-26"	percidae
walleye 22-30"	percidae
walleye 25-30"	percidae
walleye 26-30"	percidae
walleye < 12"	percidae
walleye < 15"	percidae
walleye < 15-20"??	percidae
walleye < 18"	percidae
walleye < 20"	percidae
walleye < 22"	percidae
walleye < 25"	percidae
walleye < 26"	percidae
walleye < 30"	percidae

Species Common Name (hierarchical)	Taxonomic Family/Notes
walleye > 15"	percidae
walleye > 18"	percidae
walleye > 19"	percidae
walleye > 20"	percidae
walleye > 22"	percidae
walleye > 23"	percidae
walleye > 25"	percidae
white bass	percichthyidae
white bass 12-15"	percichthyidae
white bass > 11"	percichthyidae
white bass > 13"	percichthyidae
white perch	percichthyidae
white perch > 16"	percichthyidae

Taxon and Species Sorted by Taxon

The following is a taxonomy of species common names for the Fish Consumption Database, with taxonomic family and/or notes. Hyphens show taxonomic hierarchy, down from left to right. Tissues are in parentheses.

**** Taxon: —**
(liver)

fish
fish > 21"
fish > 3 lb
fish except banned species
fish except herring, shad, & shellfish
fish except panfish
fish except salmon & trout-lake > 24"
fish except trout-brown & eel-american
fish-bottom
fish-sport
fish-sport: local except croaker-white
seafood

**** Taxon: acipenseridae**

sturgeon
sturgeon (eggs) [shovelnose?]
sturgeon > 50"
sturgeon-lake
sturgeon-shovelnose
sturgeon-shovelnose (eggs)

**** Taxon: anguillidae**

eel
eel-american

**** Taxon: belonidae**
needlefish-atlantic

**** Taxon: catostomidae**

buffalo
buffalo < 30"
buffalo > 18"
buffalo > 20"
buffalo > 23"
buffalo-bigmouth
buffalo-largemouth
buffalo-smallmouth
buffalo-smallmouth 15-20"
carpsucker
carpsucker > 18"
carpsucker-quillback
carpsucker-quillback < 15"
redhorse
redhorse 15-20"
redhorse < 25"
redhorse-shorthead 15-20"

redhorse-silver
 redhorse-silver 15-20"
 redhorse-silver 20-25"
 sucker
 suckern < 25"
 sucker-longnose > 16"
 sucker-white
 sucker-white 15-20"
 sucker-white 15-25"
 sucker-white 20-25"
 sucker-white < 15"
 sucker-white < 15-20"??

**** Taxon: centrarchidae**

bass-largemouth
 bass-largemouth 10-12"
 bass-largemouth 10-15"
 bass-largemouth 10-18"
 bass-largemouth 12-15"
 bass-largemouth 12-18"
 bass-largemouth 12-22"
 bass-largemouth 15-18"
 bass-largemouth 15-20"
 bass-largemouth 15-22"
 bass-largemouth 18-22"
 bass-largemouth < 10"
 bass-largemouth < 12"
 bass-largemouth < 15"
 bass-largemouth < 15"
 bass-largemouth < 18"
 bass-largemouth < 20"
 bass-largemouth > 14"
 bass-largemouth > 15"
 bass-largemouth > 2 lb
 bass-rock
 bass-rock < 10"
 bass-rock < 15"
 bass-smallmouth
 bass-smallmouth 10-18"
 bass-smallmouth 12-15"
 bass-smallmouth 12-18"
 bass-smallmouth 15-20"
 bass-smallmouth 15-22"
 bass-smallmouth 18-22"
 bass-smallmouth < 10"
 bass-smallmouth < 12"
 bass-smallmouth < 15"
 bass-smallmouth < 15"
 bass-smallmouth < 18"
 bass-smallmouth < 20"
 bass-smallmouth > 16

bass-smallmouth > 18
 crappie
 crappien > 9"
 crappie-black
 crappie-black 10-12"
 crappie-black 12-15"
 crappie-black < 10"
 crappie-black < 12"
 crappie-black < 15"
 bass-rock > 8"
 sunfish-bluegill
 sunfish-bluegill < 10"
 sunfish-bluegill < 15"
 sunfish-bluegill > 8"
 sunfish-green
 sunfish-pumpkinseed

**** Taxon: centrarchidae?**

bass-hybrid

**** Taxon: cichlidae**

tilapia

**** Taxon: clupeidae**

shad-gizzard > 10"

**** Taxon: cyprinidae**

carp
 carp 20-25"
 carp 20-30"
 carp < 15"
 carpn < 30"
 carp > 15"
 carp > 17"
 carp > 21"
 carpn > 22"
 carpn > 24"
 carpn > 26"
 goldfish
 squawfish

**** Taxon: decapoda**

shellfish-crab-blue
 shellfish-crab-blue (hepatopancreas)
 shellfish-lobster
 shellfish-lobster (tomale)

**** Taxon: esocidae**

muskellunge
 muskellunge 20-25"
 muskellunge > 30"

muskellunge-tiger
 pike-northern
 pike-northern 15-18"
 pike-northern 15-20"
 pike-northern 15-25"
 pike-northern 15-30"
 pike-northern 18-26"
 pike-northern 18-30"
 pike-northern 20-25"
 pike-northern 20-30"
 pike-northern 22-26"
 pike-northern 22-30"
 pike-northern 25-30"
 pike-northern 26-30"
 pike-northern < 15"
 pike-northern < 18"
 pike-northern < 22"
 pike-northern < 26"
 pike-northern < 30"
 pike-northern > 15"
 pike-northern > 20"
 pike-northern > 22"
 pike-northern > 23"
 pike-northern > 25"
 pike-northern > 26"
 pike-northern > 28"
 pike-northern > 30"

**** Taxon: ictaluridae**

catfish
 catfish (filet)
 catfish 15-20"
 catfish 25-30"
 catfish < 20"
 catfish > 15"
 catfish > 22"
 catfish-bullhead
 catfish-bullhead-black < 15"
 catfish-bullhead-brown
 catfish-bullhead-brown > 14"
 catfish-channel
 catfish-channel 16-23"
 catfish-channel 21-23"
 catfish-channel 21-25"
 catfish-channel > 15"
 catfish-channel > 23"
 catfish-channel > 24"
 catfish-channel > 25"
 catfish-channel > 26"
 catfish-flathead
 catfish-flathead 22-30"

catfish-flathead > 16"
 catfish-flathead > 26"
 catfish-flathead > 30"
 catfish-white

**** Taxon: labridae**

tautog

**** Taxon: mollusca**

shellfish-bivalves
 shellfish-bivalves-mussel

**** Taxon: mollusca or crustacea**

shellfish

**** Taxon: osmeridae**

smelt-rainbow

**** Taxon: percichthyidae**

striped bass
 striped bass & white bass hybrid
 white bass
 white bass 12-15"
 white bass > 11"
 white bass > 13"
 white perch
 white perch > 16"

**** Taxon: percidae**

perch
 perch-yellow
 perch-yellow 10-12"
 perch-yellow 10-15"
 perch-yellow 12-15"
 perch-yellow < 10"
 perch-yellow < 12"
 perch-yellow < 15"
 perch-yellow > 10"
 sauger
 sauger < 15"
 walleye
 walleye 10-15"
 walleye 10-30"
 walleye 12-15"
 walleye 12-18"
 walleye 12-22"
 walleye 15-18"
 walleye 15-20"
 walleye 15-22"
 walleye 15-25"
 walleye 15-26"

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walleye 15-30"
 walleye 18-22"
 walleye 18-26"
 walleye 18-30"
 walleye 20-25"
 walleye 20-30"
 walleye 22-26"
 walleye 22-30"
 walleye 25-30"
 walleye 26-30"
 walleye < 12"
 walleye < 15"
 walleye < 15-20"??
 walleye < 18"
 walleye < 20"
 walleye < 22"
 walleye < 25"
 walleye < 26"
 walleye < 30"
 walleye > 15"
 walleye > 18"
 walleye > 19"
 walleye > 20"
 walleye > 22"
 walleye > 23"
 walleye > 25"

**** Taxon: pleuronectidae**

flounder

**** Taxon: polyodontidae**

paddlefish

paddlefish (eggs)

**** Taxon: pomadasyidae**

sargo

**** Taxon: pomatomidae**

bluefish

bluefish > 25"

**** Taxon: salmonidae**

ciscowet

ciscowet > 15"

salmon-chinook

salmon-chinook 21-23"

salmon-chinook 21-32"

salmon-chinook > 21"

salmon-chinook > 25"

salmon-chinook > 32"

salmon-coho > 21"

salmon-coho > 26"

trout

trout > 25"

trout-brook

trout-brook < 15"

trout-brook < 20"

trout-brook > 15"

trout-brown

trout-brown < 20"

trout-brown < 21"

trout-brown < 23"

trout-brown > 12"

trout-brown > 20"

trout-brown > 21"

trout-brown > 23"

trout-lake

trout-lake 15-20"

trout-lake 15-25"

trout-lake 15-30"

trout-lake 20-23"

trout-lake 20-25"

trout-lake 20-30"

trout-lake 25-30"

trout-lake < 25"

trout-lake < 30"

trout-lake > 21"

trout-lake > 23"

trout-lake > 24"

trout-lake > 25"

trout-lake > 30"

trout-lake > 32"

trout-rainbow

trout-rainbow 15-20"

trout-rainbow < 15"

trout-rainbow < 21"

trout-rainbow > 22"

trout-rainbow > 25"

trout-splake

trout-splake < 16"

trout-splake < 20"

trout-splake > 12"

trout-splake > 16"

tullibee < 15"

**** Taxon: sciaenidae**

corvina

corvina-orangemouth

croaker

croaker-white

drum

drum-freshwater > 12"

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drum-freshwater > 14"
 sea trout-speckled
 sea trout-white

**** Taxon: sparidae**
 scup

**** Taxon: testudines-cryptodira-chelydridae**
 turtle-snapping < 15

Pollutants

Cadmium
 Chlordane
 Chlorinated organics
 Creosote
 DDT
 Dichlorobenzene
 Dieldrin
 Dioxins*

Gasoline
 Heavy metals
 Heptachlor epoxide

Hexachlorobenzene
 Hexachlorobutadiene
 Kepone
 Lead
 Mercury
 Metals
 Mirex
 Multiple
 Not specified
 Organo-metallics
 PAHs

PBBs
 PCBs
 Pentachlorobenzene
 Pesticides
 Photomirex
 Phthalate esters
 Priority organics
 Selenium
 Tetrachlorobenzene
 Tributyltin

* Indicates that dioxins and/or dibenzofurans may be present.

Populations

Population Code	Definition
Blank	No bans or advisories or no information available.
*	Indicates that dioxins and/or dibenzofurans may be present.
CFB	Bans commercial harvest and/or sale of fish and shellfish.
NCGP	Advises against consumption of fish and shellfish by the general population.
NCSP	Advises against consumption of fish and shellfish by subpopulations potentially at greater risk, e.g., pregnant or nursing women, and small children.
NONE	No bans or advisories.
RGP	Advises the general population to restrict the size and frequency of meals of fish and shellfish.
RSP	Advises subpopulations potentially at greater risk, e.g., pregnant or nursing women, or small children, to restrict the size and/or frequency of meals of fish and shellfish.

Appendix V Data Revision Submittal Forms*

Submit data additions or corrections on copies of the following forms to:

Alison Greene
U.S. Environmental Protection Agency
Risk Assessment Management Branch
(WH-585)
401 M Street, SW
Washington, DC 20460

* As of January 29, 1992

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BAN OR ADVISORY DATA FORM

Please complete a separate sheet for each ban or advisory. The data fields for the bans and advisories are:

State, 2 letters - e.g., AK, VA, OK _____

Waterbody Name _____

Geographic Extent - Describe the portion of the waterbody that is covered by the ban or advisory. Latitudes and longitudes or Reach File segment IDs (if known) are greatly appreciated.

Pollutant(s) - e.g., "Pesticide" or "Chlordane" _____

Species Common Name - e.g., Carp _____

Status Code of Ban or Advisory - Only the status codes present in the database as of this writing are listed. If you need a new code, please write in a code less than five letters long and define it. CIRCLE ALL CODES THAT APPLY.

Code Definition

- Blank - No bans or advisories or no information available.
- * - Indicates that dioxins and/or dibenzofurans may be present
- CFB - Bans commercial harvest and/or sale of fish and shellfish.
- NCGP - Advises against consumption of fish and shellfish by the general population.
- NCSP - Advises against consumption of fish and shellfish by subpopulation(s) potentially at greater risk, e.g., pregnant or nursing women, and small children.
- NONE - No bans or advisories.
- RGP - Advises the general population to restrict the size and frequency of meals of fish and shellfish.
- RSP - Advises subpopulations potentially at greater risk (e.g., pregnant or nursing women, or small children) to restrict the size and/or frequency of meals of fish and shellfish.

Start Date ___/___/___ End Date ___/___/___

If a contact person and/or organization that can give more details about the ban or advisory is not already listed in the Contacts file and you have not yet completed a Contact Data Form for that person/organization, then you should complete a Contact Data Form now.

Contact _____

These data are accurate as of ___/___/___.

Your name, address, and phone number _____

DOCUMENT DATA FORM

Please complete a separate sheet for each document. The data fields for the bans and advisories are:

Author(s) - Complete names (if available) of all authors or of the responsible institution if persons are not named.

Publication Date - Accurate to the year, month, or day _____

Title(s) - For articles or a chapter, give also the title of the journal or book, with volume and issue numbers for articles and page ranges for articles and chapters.

Publisher or Agency Name - The original source institution, regardless of who is now supplying copies to the public.

NTIS or Other Publication ID Code - Document numbers or codes used by the publisher or supplier to catalogue each item published or supplied.

Keywords - Terms serving to summarize or classify the document's contents. Please use the keywords listed in Appendix III. If you must add a new keyword, please define your usage if the term has multiple meanings. If you wish, simply attach an annotated copy of Appendix III.

Abstract - A brief summary, written by the author if possible. Please attach a separate sheet.

If a contact person and/or organization that can supply copies of the document is not already listed in the Contacts file and you have not yet completed a Contact Data Form for that person/organization, then you should complete a Contact Data Form now.

Contact _____

These data are accurate as of ___/___/___.

Your name, address, and phone number _____

CONTACT DATA FORM

Please complete a separate form for each contact. The data fields for the Contacts file are:

Full name _____

Job title, Organization, and Department, if available _____

Address, street and/or P.O. Box _____

City, State, and ZIP code _____

Area code and telephone number(s) _____

Fax number, if available _____

These data are accurate as of ___ / ___ / ___.

Your name, address, and phone number _____

CONTACT DATA FORM

Please a complete a separate form for each contact. The data fields for the Contacts file are:

Full name _____

Job title, organization, and subdivision if available _____

Address, street and/or P.O. Box. _____

City, State, and ZIP code _____

Area code and telephone number(s) _____

Fax number, if available _____

These data are accurate as of ___ / ___ / ___.

Your name, address, and phone number _____

FISH CONSUMPTION SURVEY DATA FORM

Please complete a separate sheet for each survey. Split the survey data into parts that will fit into the existing fields for document data. The data layout for surveys is explained below.

Scientists (Author(s)) - Complete names (if available) of principal investigators and/or other authors or of the responsible institution if persons are not named.

Estimated or actual completion date (Publication date) - Accurate to the year, month, or day

Name of study (Title(s)) - the name by which the survey project is known.

Responsible, performing, or lead agency, regardless of who employs the scientist or the contact person (Publisher or Agency name)

Project code if any such code is available (NTIS or other publication ID code - Document numbers or codes used by the publisher to catalogue each item published)

Keywords - Terms serving to summarize or classify the survey's characteristics. Use the keywords listed in Appendix III. Specify the location of the survey, the target population, and the type of survey. If you must add a new keyword, please define your usage if the term has multiple meanings.

Survey-consumption, _____

Abstract - A brief summary, if needed; written by the scientist(s), if possible. Please attach a separate sheet.

These data are accurate as of ___ / ___ / ___

If a contact person and/or organization that can supply additional information about the survey is not already listed in the Contacts file and you have not yet completed a Contact Data Form for them, then you should complete a Contact Data Form now.

Contact _____

Your name, address, and phone number _____

Appendix VI History of the Bans and Advisories File

The original Bans and Advisories data file was created in Lotus® 1-2-3 format by Dr. Patricia Cunningham and Julie M. Duffin of the Center for Environmental Analysis, Research Triangle Institute (RTI), Research Triangle Park, NC 27707. (Contact Cunningham or Duffin at (919) 541-6944 and 541-6112, respectively, for more information about the compilation of the original file.)

The original file was compiled with information extracted from 1990 state 305(b) reports, from some state fish consumption advisory bulletins, and in a few cases from telephone contacts with state officials when 305(b) information was not available. Several states provided information on several categories of advisories, e.g., restricted consumption advised for the general public or no consumption advised for pregnant women, nursing mothers, and children. However, when a state did not specify the target population, RTI assumed that the advisory was no consumption for the general public.

Subsequent work with the database was performed by Tom Davis of Tetra Tech, Inc. and James N. Nelson, an independent programming consultant. They converted the Lotus® 1-2-3 file to FoxPro™ format, which is a derivative of dBASE™ III+ format.

After this format change, the database was modified in three major ways. First, the file was expanded to hold a single record for each unique combination of fish type, pollutant, and target population. Second, some data fields were modified to improve consistency or operational performance. Third, additional information categories or data fields were added. These changes are discussed below.

Each record in the RTI file was assigned a unique alphanumeric code (Ban ID) for identification. Next, each record was analyzed to determine the unique combinations of the species, target population, and pollutant. For example, if a record had two target populations, two pollutants, and three fish types, then its information was distributed to 12 records ($2 \times 2 \times 3 = 12$). Each of the 12 new records would have only one target population, one pollutant, and one fish type. All of the information in the original file for a particular record was retained, and all the new records have the same Ban ID. The results of this modification were very carefully checked for accuracy.

Some records in the Waterbody field also have apparent multiple entries, such as two lakes or a river and one of its tributaries listed together. These entries were not modified because of the difficulty of determining whether these discrete waterbody names are actually separate waterbodies. Some river names were made consistent, however, or revised so they will sort together logically. For example, "Upper Fox River" was changed to "Fox River, Upper" and "Lower Fox River" was changed to "Fox River, Lower" so that they will show up together when the file is sorted by waterbody name.

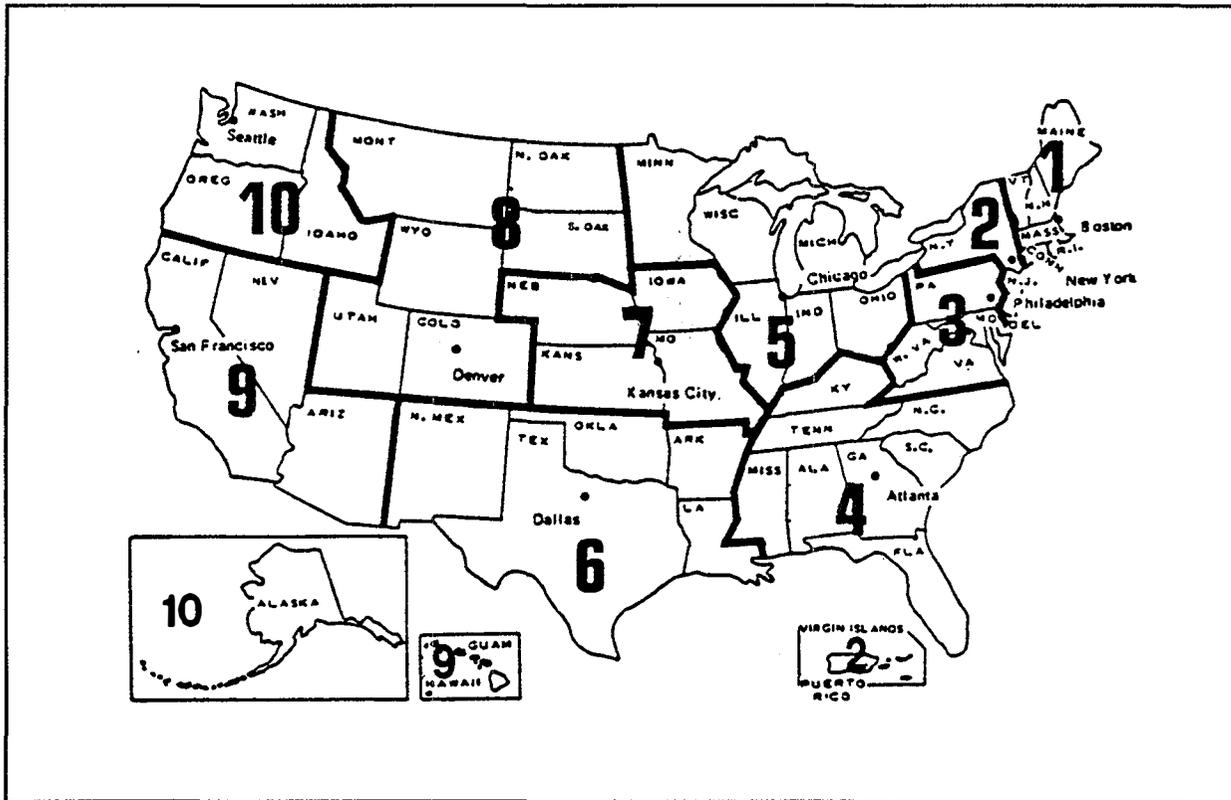
The species common names in the original file were modified to improve sorting sequences and taxonomic consistency. For example, all catfish (ictaluridae) common names were reversed so that "white catfish" became "catfish-white". Centrarchid bass names were reversed like catfish names, but non-centrarchid bass names were not. If you are uncertain how to search for a particular species, refer to Appendix IV for the species names used in the database, listed by modified common name and by family.

The state contact person listed in EPA's mailing list was arbitrarily assigned as the contact person for each advisory. These contact data may be out-of-date for some states. The EPA Region numbers were assigned based on State postal codes. The check date was set to 5/29/91, the date when RTI stopped modifying the original file.

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Tetra Tech added some additional bans and advisories that have later check dates. Tetra Tech also added two new fields, the date the advisory started and the date it ended. These fields are, and may remain, empty for the original records created by RTI.

Appendix VII EPA Regions and State Postal Codes



EPA REGIONS

4	Alabama	1	Maine	3	Pennsylvania
10	Alaska	3	Maryland	1	Rhode Island
9	Arizona	1	Massachusetts	4	South Carolina
6	Arkansas	5	Michigan	8	South Dakota
9	California	5	Minnesota	4	Tennessee
8	Colorado	4	Mississippi	6	Texas
1	Connecticut	7	Missouri	8	Utah
3	Delaware	8	Montana	1	Vermont
3	D.C.	7	Nebraska	3	Virginia
4	Florida	9	Nevada	10	Washington
4	Georgia	1	New Hampshire	3	West Virginia
9	Hawaii	2	New Jersey	5	Wisconsin
10	Idaho	6	New Mexico	8	Wyoming
5	Illinois	2	New York	9	American Samoa
5	Indiana	4	North Carolina	9	Guam
7	Iowa	8	North Dakota	2	Puerto Rico
7	Kansas	5	Ohio	2	Virgin Islands
4	Kentucky	6	Oklahoma		
6	Louisiana	10	Oregon		

TWO-LETTER STATE POSTAL CODES

Alabama	AL	Montana	MT
Alaska	AK	Nebraska	NE
Arizona	AZ	Nevada	NV
Arkansas	AR	New Hampshire	NH
American Samoa	AS	New Jersey	NJ
California	CA	New Mexico	NM
Canal Zone	CZ	New York	NY
Colorado	CO	North Carolina	NC
Connecticut	CT	North Dakota	ND
Delaware	DE	Ohio	OH
District of Columbia	DC	Oklahoma	OK
Florida	FL	Oregon	OR
Georgia	GA	Pennsylvania	PA
Guam	GU	Rhode Island	RI
Hawaii	HA	South Carolina	SC
Idaho	ID	South Dakota	SD
Illinois	IL	Tennessee	TN
Indiana	IN	Trust Territories	TT
Iowa	IA	Texas	TX
Kansas	KS	Utah	UT
Kentucky	KY	Vermont	VT
Louisiana	LA	Virginia	VA
Maine	ME	Virgin Islands	VI
Maryland	MD	Washington	WA
Massachusetts	MA	West Virginia	WV
Michigan	MI	Wisconsin	WI
Minnesota	MN	Wyoming	WY
Mississippi	MS		
Missouri	MO		

