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**REPORT OF THE MAPPING
CONSULTANT ACCOMPLISHED
FOR THE SAMAR ISLAND
BIODIVERSITY STUDY¹**



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CONSULTANT ACCOMPLISHED
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by

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**REPORT OF THE MAPPING CONSULTANT
ACCOMPLISHED FOR THE
SAMAR ISLAND BIODIVERSITY STUDY
JUNE 2000 - JANUARY 2001**

1. BACKGROUND: CONTRACT AND TERMS OF REFERENCE

1.1. *Contract Details*

- The start of the contract was June 1, 2000 and the main assignment was to provide cartographic services for the Samar Island Biodiversity Study (SAMBIO).
- Contract duration was for a period of 2.5 man-months lasting from June 1, 2000 up to August 15, 2000.
- The SAMBIO Team Leader was identified as the direct supervisor for all mapping activities.
- The Contract's Terms of Reference specified the following tasks:
 - Provide the CPU and monitor for the mapping requirements.
 - Digitize all maps required by the Project.
 - Translate all maps into one format.
 - Convert all maps into electronic copies for SAMBIO specialists.

1.2. *Extensions*

Due to the realization that more refinements to the map outputs were necessary, the contract was extended from August 15, 2000 up to December 31, 2000. A second extension occurred from December 31, 2000 up to January 31, 2001 for similar reasons. Total duration of rendered service: 7 man-months.

1.3. *Comments*

The SAMBIO Project began in December 1999 and was originally scheduled to end by December 2000. Since the need for a Mapping Consultant was determined mid-way into the Project, it was uncertain from the start whether all map requirements of the Project would be satisfied especially since these targets were not yet concretely defined at the beginning of mapping activities.

Data gathering and processing was projected to take up about 30% of the contract duration since no previous digital spatial sets had been processed for the Project. Final map preparation would take up about 40% of the period, while the remaining 10% would be dedicated to final edits and report generation. Due to the limited time, it was therefore agreed that prioritization of map outputs would be left flexible to allow for contingencies that came up during the contract duration.

During the course of the Project, map requests were accepted from Project Specialists and these were prioritized together with the Team Leader on the basis of importance and urgency of these said requests. As the work progressed, cartographic needs became clearer and it was therefore possible to project targets more clearly, resulting in the contract extensions mentioned previously.

2. PLAN OF ACTION

In order to refine the Terms of Reference, the following Plan of Action was developed (This was presented to and approved by the SAMBIO Team Leader and the specialists on July 12, 2000.):

2.1. Setup

Hardware

Provide computer and monitor as stipulated in the contract. Other necessary equipment would be provided by SAMBIO:

- Digitizer for data input - this would be used to trace hardcopy maps to input into the computer where digital versions are not available. A 12" x 12" digitizer was specified.
- Colored printer for data output - maximum size specified was A3 (approximately 11" x 14").
- Zip drive for data archiving - this is a high-capacity (100Mb) storage device in order to accommodate the potentially large sizes of graphical data.
- Scanner for other input requirements - where features are not readily traceable, it would be more efficient to scan these directly into the computer; lettersize flatbed was specified.

Software

- Install Computer-Aided Mapping software - this would be used for data input, processing, and output.
- Install Geographic Information System (GIS) software - this would be necessary where spatial data analysis is required.

2.2. Data Gathering and Review of Available Data

- Obtain source data from Research Associates - any form of spatial data relating to the study area would be acceptable.
- Collate source data - in order to have an overview of what is available and what is useable.

2.3. Database Development

- Catalog all source data - it is important that the different formats of all source data be properly indexed since map production would certainly demand the use of different types of source materials.
- Present catalog to all specialists in order to facilitate map requests - this will allow specialists to see what data is available, what formats and quality they are in, and to specify map requests based on useable data only.

2.4. Spatial Data Processing

- Collect map requests from all specialists - a request form was designed and submitted requesting the specialists to provide the following details in map requests:
 - Map Title.
 - Features to be included on the map (based on useable source data).
 - Legend details: symbols and colors.
 - Output size.
 - Number of Copies
- Prioritize requests together with the Team Leader - since it is possible that multiple requests arrive at the same time, it is necessary to determine in what order these requests would be satisfied.
- Digitize source maps where necessary - not all features in each source map would be needed so only those features relating to the various areas of study would be traced into the computer.
- Edit digitized features to ensure proper registration with each other - it is expected that the various source maps would have different sizes, scales, and geographic coordinates; it is therefore necessary to correct these maps to one another in order to be able to relate features from different source maps properly.

2.5. Map Generation

- Compose maps based on request details - based on the details specified in the map requests, relevant features would be selected and overlaid and proper technical map details would be added such as production details, appropriate legends, scale bar, north arrow, and other important annotations.
- Print maps in specified format - all maps will be produced in color but sizes may vary depending on the needs of the different specialists.

3. PROCESS DOCUMENTATION

3.1. Setup

Hardware

- The computer used was a Pentium II compatible with a 14" monitor. No modifications or additional setup procedures were necessary.
- A CalComp 12" x 12" digitizer with wireless puck was purchased from CompuAdd on June 1, 2000. Device drivers were installed and the unit was tested for accuracy.

***Problems encountered: Upon inspection, it was discovered that the digitizer had some defects which would adversely affect the quality of map inputs. The unit was brought back to CompuAdd for replacement. This was accomplished at no extra cost.

- A Hewlett-Packard Deskjet 1180C colored inkjet printer was provided by SAMBIO on January 24, 2001.
- An Iomega 100Mb Zip Drive was provided on June 15, 2001.
- A Hewlett-Packard scanner was provided on June 10, 2000.

***Problems encountered: The serial port on the mapping computer had a standard RS232-C connector whereas the scanner only supported the Universal Serial Bus (USB). This meant that the scanner would be unusable and it was decided upon consultation that the work would have to make do with the digitizer unless it became absolutely necessary to purchase a USB adapter kit which would entail extra expenses. Fortunately, this need did not arise.

Software

- Autocad 2000 was selected as the Computer-Aided Mapping software and this was installed on the computer then reconfigured to satisfy the specific needs of the cartographic work.
- Atlas GIS (version 3.01) was installed as the Geographic Information System (GIS) software since this was the only available GIS program and most of the digital data available was created using this program.

***Problems encountered: The basic difference between a Computer-Aided Mapping program and a Geographic Information System program is that the GIS allows queries to address spatially-related questions. One of its more important functions (and which would have greatly benefited the project in this case) is to allow georeferencing or the proper registration of spatial data from various sources in accordance with real-world coordinate systems. Problems in these aspects, however, were encountered with the Atlas program and this prevented the application of GIS to the datasets. For one, no translation utility was provided in the

program and cut-and-paste using the Windows clipboard was the only way by which an Atlas file could be transported into Autocad. This had to be done for each separate layer in a file. Unfortunately, this procedure removed all georeferencing information and made re-registration necessary every time. This also meant that coordinates had to be re-inputted every time translation had to be implemented.

Other limitations observed with the Atlas GIS program (version 3.01) were:

- The program has an exclusive file format not readily translatable and there is no import / export option.
- Features cannot be editing as objects, instead, modifications to feature geometry have to be done vertex-by-vertex.
- The program does not allow on-screen digitizing making it harder to edit features.
- Freehand objects cannot be georeferenced.
- Layers cannot be processed by batch and any common edits have to be done separately.
- Re-registration is not allowed so if modifications have to be made, the feature has to be re-digitized from scratch.
- Rubber-sheeting is not supported and only proportional scaling is allowed.

These limitations make Atlas a poor choice for GIS software. On the other hand, since Autocad is not a GIS, it was not possible to properly georeference the maps and errors in registration had to be accepted.

3.2. *Data Gathering and Review of Available Data*

Source data came from varied sources and therefore formats were also different for each set. Following is a summary of source data received:

Hardcopy Maps: 160 sheets

***Problems encountered: most of these maps had no details of sources, projection used, tics and coordinates, and scale. This would create problems in digitizing and georeferencing (see section on Spatial Data Processing below).

Digital Data

- Atlas (.agf) format: 59 files composed of 364 unique layers
- Corel Draw (.cdr) format: 10 files
- Arc Info (.cov) format: 3 files
- Autocad (.dxf) format: 3 files
- Spans (.vec) format: 16 files

***Problems encountered: The Atlas files (received from the Samar Island Biodiversity Project (SIBP)) were used as the main source of feature data since these were already in digital format and were the most extensive data sets. Atlas handles data by using "Project" files. These project files consist of different sub-files (up to 13) for a particular GIS database. If any sub-file is corrupt or non-existent, then the

main Project File itself cannot be accessed.

Unfortunately, most of the SIBP digital data received lacked some necessary sub-files and this prevented access to the Project Files. Possibly the sub-files were stored on a different subdirectory from the main Project Files on the original hard disk from where these came and were accidentally left out during the copy process.

Another, and more alarming observation was that layers within the same file were not properly registered to each other such that municipal boundaries sometimes overshot the coastline as an example. This problem was magnified when data from different files were overlayed and compared. This indicates poor attention to detail which is especially significant within the GIS framework since geographic location and relation of such features holds such valuable information that one cannot afford to be unwary of such errors.

Finally, the whole design of the GIS database left much to be desired. An important aspect of GIS is the proper description and encoding of each feature and its characteristics within a dataset. This allows for valuable information regarding a feature to be readily available to any user of the database. In case of the SIBP data, no standard for encoding was used and most themes lacked the proper descriptive information. This fact alone reduced the value of the database dramatically in terms of its being a proper GIS and its usefulness in spatial data analysis to something just a little better than an ordinary paper map.

The Autocad files were used merely to create a properly georeference base map upon which all other features would be reference. The Corel Draw, Arc Info, and SPANS files are application-specific formats and are readily usable only from within those application programs. Since software was not available to import these formats, the files were not used in map development. Another major problem was that different formats are not readily translatable into each other and if possible, oftentimes, some information is lost in the translation process. This problem clearly depicts the need for some standardization when it comes to digital data management especially within an institute or project.

3.3. Database Development

After reviewing the available data, an MS Excel database was developed which lists all data sources and gives specific technical cartographic details for each. This was submitted to the Team Leader and eventually disseminated to the specialists.

The cartographic database gave each specialist a detailed description of all available data and the quality and usability of each item. It also provided a means by which maps could be designed by each specialist and these specifications could then be processed.

Features were further classified as either point, arc, or polygon to specify whether only distance or also area measurements could be made.

3.4. Spatial Data Processing

The first step in spatial data processing was to create a base layer upon which all other features, whether in native digital form or digitized from the hardcopy maps, would be referenced. The Autocad (.dxf) files were used for this purpose since this was the only dataset which was properly georeferenced using the Transverse Mercator Projection and the UTM coordinate system. This allowed for distance and area measurements in meters. Only the coastline of Samar Island was used.

Features which were relevant to SAMBIO's study sites were then selected. The main features involved were the whole of Samar island's coastline, provincial and municipal boundaries, watershed boundaries, barangay points, landuse, the Samar Island Forest Reserve, and the Samar Island National Park. Other features used were determined by the specific map requests from the specialists. Each selected feature was then inputted onto the base layer (digitized first if from hardcopy) and edited to fit the base layer as closely as possible.

***Problems encountered: Since only hardcopy maps had to be digitized, and since most of these were not properly produced with standard technical details (as mentioned in the Data Gathering section previously), it was often difficult, sometimes even impossible, to properly register features to one another especially without a proper GIS program to work with. Following the principle of "Garbage In, garbage Out" or GIGO, errors were inherent from beginning of the digitizing process and these would be highlighted during map editing.

Another major problem was that Autocad is not a GIS and editing of each feature required scaling and stretching without the benefit of mathematical parameters to guide the process. Autocad is also limited in the fact that it does not allow independent x-y scaling so that a "fit" in one area of the map would compromise "fit" in some other area. Since this is largely a visually-oriented procedure, and since subjectivity (in this case the Northwest-Southeast direction was opted for) was a factor in determining "fit", errors were inherent and even sometimes observable in the final outputs.

Once the main features of Samar Island were edited, these comprised the base digital dataset and would be the source of any maps to be requested during the course of the project. (Copies of these digital files shall be submitted to SAMBIO as final deliverables.)

3.5. Map Generation

Requests for maps were received from the different specialists and each map request was presented to Team Leader for notification and approval. Based on the details specified in the requests, maps were composed and printed (when requested), then presented to the Team Leader before submission to the requesting specialist.

***Problems encountered: Due to limited time, digitizing was kept to a minimum and data mostly relied on the digital rather than the hardcopy sets, sometimes sacrificing accuracy for speed. Editing was also limited to a close representation of actual conditions and it was agreed with the Team Leader that due to the inherent errors, maps

would remain indicative only (for depiction of relative sizes and positions) and not for actual measurements or analysis. Another problem encountered was in layouting: since most Computer-Aided Design programs such as Autocad do not incorporate desktop publishing features, modifications to layout elements such as annotation placement, font type and size, subtle colorations and other aesthetic items (which are, for the most part, determined subjectively) cannot be automated as in a desktop publishing program. Modifications then have to be done manually and one element or feature at a time. This made the task of revising quite tedious and took up more time than necessary.

4. SUMMARY OF OUTPUTS

4.1. Maps (Title - Requestor)

- BARANGAY LOCATOR - Research Associate
- BAUXITE LOCATIONS - Specialist: Mining
- COMMUNAL IRRIGATION SYSTEMS - Specialist: Watersheds
- FIGURE 2. WATERSHED MAP OF SAMAR ISLAND - Specialist: Watersheds
- FIGURE 3. CLIMATIC MAP OF SAMAR ISLAND - Specialist: Watersheds
- FIGURE 5. ISOHYETAL MAP OF SAMAR ISLAND - Specialist: Watersheds
- FIGURE 9. SLOPE MAP OF SAMAR - Specialist: Watersheds
- FIGURE 10. SOIL MAP OF SAMAR ISLAND - Specialist: Watersheds
- FIGURE 11. SOIL SAMPLING SITES - Specialist: Watersheds
- FIGURE 12. LAND USE MAP OF SAMAR ISLAND - Specialist: Watersheds
- FIGURE 13. SAMAR ISLAND FOREST RESERVE - Specialist: Watersheds
- FIGURE 14. PROPOSED SAMAR ISLAND NATIONAL PARK - Specialist: Watersheds
- FIGURE 18. SOIL EROSION POTENTIAL OF BASEY, CAN-AVID AND SULAT - Specialist: Watersheds
- FIGURE 19. SOIL EROSION POTENTIAL OF SAMAR ISLAND - Specialist: Watersheds
- FIGURE 20. CRITICAL AREAS IN SAMAR WATERSHEDS - Specialist: Watersheds
- FOREST RESOURCE ASSESMENT (FRA) TRANSECTS - Specialist: Forestry
- FRA TRANSECT DETAILS - Specialist: Watersheds
- FRA WITH MUNICIPALITIES, ROADS, LAND USE, AND WATERSHEDS - Specialist: Risk Assessment
- LAND USE - Specialist: Fauna
- LAND USE AND WATERSHEDS - Specialist: Risk Assessment
- LAND USE AND WATERSHEDS (BASEY, CAN-AVID, SULAT) - Specialist: Watersheds
- LAND USE, SAMAR ISLAND (FINAL) - Team Leader
- LOCATION OF MINE SITES - Specialist: Risk Assessment
- LOCATION OF SAMAR ISLAND, PHILIPPINES (FINAL) - Team Leader
- MINERAL RESOURCES - Specialist: Mining
- MINING SITES WITH CONTOURS - Specialist: Risk Assessment
- MUNICIPALITIES PER WATERSHED - Research Assistant
- NATIONAL ROADS - Research Assistant
- POTENTIAL MINING SITES, SAMAR ISLAND (FINAL) - Team Leader
- SAMBIO PROJECT SITES - Team Leader
- SAMBIO STUDY SITES - Team Leader
- SAMBIO STUDY SITES (FINAL) - Team Leader

- SOILS - Specialist: Watersheds
- WATER ANALYSIS W/ STREAMS - Specialist: Risk Assessment

4.2. *Digital Files (Processed Theme - Type)*

- BARANGAYS - point
- BAUXITE LOCATIONS - polygon
- COASTLINE - polygon
- CONTOURS - arc
- DISTRICTS - arc
- ISLANDS - arc
- LAND USE - polygon
- MINERAL RESOURCES - point
- MINING SITES - point
- MUNICIPAL BOUNDARIES - arc
- PROVINCE BOUNDARIES - arc
- ROADS - arc
- SAMAR ISLAND FOREST RESERVE - polygon
- SAMAR ISLAND NATIONAL PARK - polygon
- SAMBIO STUDY SITES - point
- STREAMS - arc
- WATERSHED BOUNDARIES - polygon

4.3. *Tables and Statistics (Derived - Excel (.xls) Format)*

- CATALOG OF DIGITAL FILES
- COMMUNAL IRRIGATION SYSTEMS - listing and details
- DETAILS OF POTENTIAL MINING SITES
- LAND USE WITHIN WATERSHEDS - area statistics
- LIST OF BARANGAYS WITHIN THE SAMAR ISLAND NATIONAL PARK
- LIST OF FINAL REPORT MAPS OF THE WATERSHED SPECIALIST
- LAND USE WITHIN POTENTIAL MINING AREAS - area statistics
- MASTER LIST OF HARDCOPY MAPS WITH TECHNICAL DESCRIPTIONS
- MUNICIPALITIES - area statistics
- MUNICIPALITY AREAS WITHIN WATERSHEDS - area statistics
- POTENTIAL MINING AREAS - area statistics
- ROAD STATISTICS
- SAMAR ISLAND POLITICAL FACTS - includes municipality and barangay listings
- SAMBIO STUDY SITES - details
- WATERSHED AREAS WITHIN THE SAMAR ISLAND NATIONAL PARK - area statistics

5. RECOMMENDATIONS

5.1. *Selecting a GIS program*

In selecting a GIS program, the following guide questions should be considered:

- Does the program utilize universally accepted standard formats?
- Does the program have a good format translation (import/export) utility?
- Does the program allow georeferencing of feature attributes?
- Are feature query and measurement tools available and user-friendly?
- Can database "relate"s and "join"s be executed?
- Are zoom and pan features available?
- Is the overlay plane active?
- Can algebraic operations be performed on the spatial data?
- Are extrapolation functions for statistical data (such as maximum, average, minimum) adequate?
- Can spatial analysis, especially unions and intersections, be performed?
- Does the program have built-in buffering and filtering utilities?
- How extensive is the modeling language?
- Can the program perform 3-dimensional operations?
- Is rubber-sheeting allowed?
- How extensive are the layouting tools (e.g. annotations)?
- Is plotting to a specified scale supported?
- How facile are the re-coding options?
- What feature editing tools are available?
- How functional are the attribute input and edit functions?
- Is scanning and on-screen digitizing supported?
- Are re-projection and re-registration operations allowed?

Another important consideration when selecting GIS software is its capabilities for georeferencing. Georeferencing is the process in which a map is made to conform with a standard projection and scale. A projection determines a map's shape and coordinate system. One of the most widely used coordinate systems is the Lat-Long (Latitude-Longitude) coordinate system wherein any point on earth has a specific and unique 2-number address pertaining to its absolute horizontal and vertical location on the globe. The process of georeferencing ensures that a map conforms to such a standard so that maps which are georeferenced to one another are readily overlayable and will properly locate features with one another accurately irregardless of the source of the data.

A good Geographic Information System (GIS) program automates a large part of the georeferencing process, ensuring proper projection and coordinate assignment using mathematical models. Without it, accurate georeferencing is practically impossible as one is limited to "manually" scaling and stretching a map feature to "fit" a reference map. "Fitting" a map involves (sometimes radical) scaling and stretching (also called rubber-sheeting) which may alter the shape and size of a feature drastically. Without the benefit of a good GIS program, this is done visually on the computer and compromises have to be made since the definition in this case of a good "fit" is largely subjective. Such alterations are also often limited to the cardinal directions and do not allow for independent x-y scaling.

Unfortunately, "manual" referencing undoubtedly creates errors in the data which cannot be readily measured.

5.2. GIS Database Development

In developing a good GIS database, it is important to remember that what is good is determined mostly by need. The main question to ask is "What are the objectives of the project and how can the GIS address spatially-related questions that may arise from these objectives?" The design of the whole database must then primarily respond to these needs even if they may not be concretely defined in the early stages of the project. Some predictions regarding questions that may arise is often necessary and answering this basic question should give the GIS manager some sense of the initial information that should be inputted into the database.

The design of the database has to be flexible enough to accomodate additional data which may become necessary in the course of the project. Yet it also has to be structured enough so that anyone who wants to access the database will not have a problem finding his way around it. Some standardization in terms of encoding is one of the best ways this can be implemented. Field names should be simple yet descriptive. Select the appropriate data type for each field. Be aware of how the data would appear when re-indexed on different fields.

The database should also be usable by researchers or students from other fields of specialization that even the most irrelevant user can derive at least some information no matter where his interest lies.

Spatial data should be properly georeferenced and the most important attributes of each feature should be included in the database. Descriptive notes are also very helpful. Where further important details cannot be incorporated, extensive documentation is the responsibility of the database developer.

Finally, understanding theories behind the development and operation of a Relational Database Management Systems should be considered a necessity.

5.3. Mapping Hardware Set-Up

The following items are recommended components for an efficient GIS station:

- Computer: consider the most powerful, then work your way down the cost range to one which is affordable (This goes for all the other equipment). If possible, add more RAM and VRAM. Remember that graphics requires a lot of computing power and the first function to be sacrificed is speed. Since graphics take a lot of space too, it would be good to get the biggest capacity harddisk you can afford.
- Monitor: ideally 17" or higher. This allows the operator to see broad areas of interest rather than continuously zooming and panning to get an overhead view. It also allows study of details with greater clarity.
- Digitizer: for tracing paper maps. Consider the most common size of the source data you will be using. Digitizers come in different sizes to suit your specific needs. Choose

a puck with very fine yet accurate crosshairs for precision. Backlighting is extremely desirable.

- Printer: again depends on the most common size for outputs desired. A colored inkjet printer is significantly more flexible than the best black&white laser printer.
- Scanner: preferably a flatbed. This is a luxury rather than a necessity since it allows spatial data to be inputted quickly into the computer. A scanner, however, rarely preserves correct scaling and referencing so even scanned images need to be re-digitized on screen.
- Storage device: for large files to be transported, submitted or stored. It may be worth considering archiving equipment such as a Zip Drive or a CD-Writer.
- UPS: due to the large files involved and the amount of processing time necessary in GIS operations, a sudden loss of power can be disastrous.
- Other equipment that should be considered are a backlit light table for supplementary manual cartographic work, and a map cabinet for storage of and easy access to paper maps.

6. FINAL REMARKS

The value of cartography in land use planning and management cannot be overstated. Since a lot of the research done in this broad field requires an understanding of spatial dynamics, there is no better tool than one which gives a visual representation of the realities involved. This is where cartography and GIS are seen, no longer as luxuries but as necessities in practical, efficient, and effective land use planning and management. The computer has been a significant development in this regard in that it has given much more functionality to the traditional paper map through computer-aided mapping (CAM) and GIS. Unfortunately, oftentimes time, budget, or data constraints reduce the possible benefits of dedicated cartographic work.

The experience of mapping for the SAMBIO study was fulfilling in that early on, the benefits of such a study, not only to the environment of Samar Island, but more importantly, to the communities who may be affected by various land use planning and management options, were clear. Sadly though, despite the desire to contribute much more to the research, some constraints such as those mentioned above hindered this.

From the beginning, it was overwhelming to see the amount of available spatial data which in itself was a significant accomplishment for SAMBIO in terms of gathering these various materials. The richness of the information contained therein would be extremely beneficial to communities and researchers alike if only there was some way by which all these could be properly managed within a GIS. A more shaking thought, however, is the realization that for various sites around the country, the same, if not more, amount of data is available for the betterment of the lives of those less fortunate. It is therefore a hope that somehow, those with the capacity to put all this information to good use realize the potential benefits of GIS and spatial data, and support the development of the skills and technology required to reap the benefits from the humanistic applications of such.

Appendix A
List of Maps Collected by SAMBIO

TITLE	COVERAGE	PARTICULARS
(CONTRACT REFORESTATION PROJECTS)	ISLANDS	SOUTH
(EASTERN SAMAR - Central Part) Land Classification	PROVINCE (partial)	SAMAR-E Central Part
(EASTERN SAMAR - Northern Part) Land Classification	PROVINCE (partial)	SAMAR-E Northern Part
(EASTERN SAMAR - Southern Part) Land Classification	PROVINCE (partial)	SAMAR-E Southern Part
(FRA TRANSECT)	MUNICIPALITY	BASEY, LLORENTE, MAYDOLONG
(GEOLOGIC MAP)	ISLAND	
(NORTHEAST TIP)	MUNICIPALITY	
(NORTHERN SAMAR ISLANDS)	PROVINCE	SAMAR-N
BARANGAY INDEX MAP	MUNICIPALITY	CAPUL
BARANGAY INDEX MAP, ALLEN, NORTHERN SAMAR	MUNICIPALITY	ALLEN
BARANGAY MAP	ISLAND	
BASE MAP SHOWING THE ADMINISTRATIVE JURISDICTION OF PENRO SAMAR	PROVINCE	SAMAR-W
BASEY OLD-GROWTH FOREST RESERVE	PROTECTION AREA	
BASEY RESIDUAL FOREST RESERVE	PROTECTION AREA	
BOBON	MUNICIPALITY	BOBON
CALAPI COMMUNAL IRRIGATION SYSTEM	COMMUNAL IRRIGATION	CALAPI
CALBIGA CAVES PROTECTED LANDSCAPE	PROTECTION AREA	
CAMARBUAN COMMUNAL IRRIGATION PROJECT	COMMUNAL IRRIGATION	CAMARBUAN
CAPUL	MUNICIPALITY	CAPUL
CASANDIG COMMUNAL IRRIGATION PROJECT	COMMUNAL IRRIGATION	CASANDIG
CATARMAN	MUNICIPALITY	CATARMAN
CATUBIG IP (Irrigation Project)	MUNICIPALITY	CATUBIG
CATUBIG VALLEY IRRIGATION DEVELOPMENT PROJECT	PROVINCE	SAMAR-N
EXISTING GENERAL LAND USE MAP 1989	MUNICIPALITY	MONDRAGON
FIGURE C-8: GROUNDWATER AVAILABILITY MAP, WATER RESOURCES REGION VIII	REGION	SAMAR-LEYTE
FORMER TIMBER LICENSES	ISLAND	
GENERAL LAND USE PLAN - LOPE DE VEGA	MUNICIPALITY	LOPE DE VEGA
GENERAL LAND USE PLAN - SAN ROQUE	MUNICIPALITY	SAN ROQUE
GENOLGAN	MUNICIPALITY	GENOLGAN
GEO-HAZARD MAP - SAMAR ISLAND	ISLAND	
GEO-HAZARD MAP - WESTERN SAMAR	PROVINCE	SAMAR-W
GEOLOGIC HAZARD MAP - LLORENTE	MUNICIPALITY	LLORENTE
GEOLOGICAL/GEOMORPHOLOGICAL MAP - WESTERN SAMAR	PROVINCE	SAMAR-W
HINIKAAN-KARANAS COMMUNAL IRRIGATION PROJECT	COMMUNAL IRRIGATION	HINIKAAN-KARANAS
INDICATIVE MANAGEMENT ZONES	ISLAND	
INDICATIVE MANAGEMENT ZONES, PROPOSED SAMAR ISLAND NATURAL PARK	ISLAND	
INFRASTRUCTURE PLAN MAP DETAILING THE PPEP	PROVINCE	SAMAR-N
INUNGAYAN COMMUNAL IRRIGATION SYSTEM	COMMUNAL IRRIGATION	INUNGAYAN
LAND CLASSIFICATION MAP, MUNICIPALITY OF MONDRAGON	ISLAND	
LAND USE - PROVINCE OF EASTERN SAMAR	PROVINCE	SAMAR-E
LAND USE / DEV. PROJECTS - BASEY	MUNICIPALITY	BASEY
LAND USE / DEV. PROJECTS - HINABANGAN	MUNICIPALITY	HINABANGAN
LAND USE / DEV. PROJECTS - JIPAPAD	MUNICIPALITY	JIPAPAD
LAND USE / DEV. PROJECTS - MARABUT	MUNICIPALITY	MARABUT
LAND USE / TOPO MAP - CALBIGA	MUNICIPALITY	CALBIGA
LAND USE / TOPO MAP - JIABONG	MUNICIPALITY	JIABONG
LAND USE MAP - PROVINCE OF NORTHERN SAMAR	PROVINCE	SAMAR-N
LAND USE MAP - SAMAR ISLAND	ISLAND	
LAND USE MAP - WESTERN SAMAR	PROVINCE	SAMAR-W
LAPAZ COMMUNAL IRRIGATION SYSTEM	COMMUNAL IRRIGATION	LAPAZ
LAS NAVAS, N. SAMAR	MUNICIPALITY	LAS NAVAS

Appendix A (continued)

TITLE	SOURCE
(CONTRACT REFORESTATION PROJECTS)	ISLANDS
(EASTERN SAMAR - Central Part) Land Classification	PROVINCE (partial)
(EASTERN SAMAR - Northern Part) Land Classification	PROVINCE (partial)
(EASTERN SAMAR - Southern Part) Land Classification	PROVINCE (partial)
(FRA TRANSECT)	IPCGS 4054-III, 4054-II, 4053-IV
(GEOLOGIC MAP)	ISLAND
(NORTHEAST TIP)	MUNICIPALITY
(NORTHERN SAMAR ISLANDS)	PROVINCE
BARANGAY INDEX MAP	MUNICIPALITY
BARANGAY INDEX MAP, ALLEN, NORTHERN SAMAR	MUNICIPALITY
BARANGAY MAP	DENR Reg. VIII, Planning & Mgmt. Div., Geographic Info. and Stat. Section
BASE MAP SHOWING THE ADMINISTRATIVE JURISDICTION OF PENRO SAMAR	PENRO - W. SAMAR
BASEY OLD-GROWTH FOREST RESERVE	PROTECTION AREA
BASEY RESIDUAL FOREST RESERVE	PROTECTION AREA
BOBON	IAMS 3957-IV
CALAPI COMMUNAL IRRIGATION SYSTEM	NIA
CALBIGA CAVES PROTECTED LANDSCAPE	PROTECTION AREA
CAMAROBUAN COMMUNAL IRRIGATION PROJECT	NIA
CAPUL	IAMS 3857-III
CASANDIG COMMUNAL IRRIGATION PROJECT	NIA
CATARMAN	IAMS 3957-III
CATUBIG IP (Irrigation Project)	NIA
CATUBIG VALLEY IRRIGATION DEVELOPMENT PROJECT	NIA
EXISTING GENERAL LAND USE MAP 1989	MUNICIPALITY
FIGURE C-8: GROUNDWATER AVAILABILITY MAP, WATER RESOURCES REGION VIII	REGION
FORMER TIMBER LICENSES	DENR Reg. VIII, Planning & Mgmt. Div., Geographic Info. and Stat. Section
GENERAL LAND USE PLAN - LOPE DE VEGA	MUNICIPALITY
GENERAL LAND USE PLAN - SAN ROQUE	MUNICIPALITY
GENOLGAN	IAMS 3957-II
GEO-HAZARD MAP - SAMAR ISLAND	DENR Reg. VIII, Planning & Mgmt. Div., Geographic Info. and Stat. Section
GEO-HAZARD MAP - WESTERN SAMAR	Wesamar GIS Unit
GEOLOGIC HAZARD MAP - LORENTE	DENR Reg. VIII, Planning & Mgmt. Div., Geographic Info. and Stat. Section
GEOLOGICAL/GEOMORPHOLOGICAL MAP - WESTERN SAMAR	Wesamar GIS Unit
HINIKAAAN-KARANAS COMMUNAL IRRIGATION PROJECT	NIA
INDICATIVE MANAGEMENT ZONES	DENR Reg. VIII, Planning & Mgmt. Div., Geographic Info. and Stat. Section
INDICATIVE MANAGEMENT ZONES, PROPOSED SAMAR ISLAND NATURAL PARK	DENR Reg. VIII, Planning & Mgmt. Div., Geographic Info. and Stat. Section
INFRASTRUCTURE PLAN MAP DETAILING THE PFP	PROVINCE
INUNGAYAN COMMUNAL IRRIGATION SYSTEM	NIA
LAND CLASSIFICATION MAP, MUNICIPALITY OF MONDRAGON	DENR Reg. VIII, Planning & Mgmt. Div., Geographic Info. and Stat. Section
LAND USE - PROVINCE OF EASTERN SAMAR	Wesamar GIS Unit
LAND USE / DEV. PROJECTS - BASEY	DENR Reg. VIII, Planning & Mgmt. Div., Geographic Info. and Stat. Section
LAND USE / DEV. PROJECTS - HINABANGAN	DENR Reg. VIII, Planning & Mgmt. Div., Geographic Info. and Stat. Section
LAND USE / DEV. PROJECTS - JIPAPAD	DENR Reg. VIII, Planning & Mgmt. Div., Geographic Info. and Stat. Section
LAND USE / DEV. PROJECTS - MARABUT	DENR Reg. VIII, Planning & Mgmt. Div., Geographic Info. and Stat. Section
LAND USE / TOPO MAP - CALBIGA	DENR Reg. VIII, Planning & Mgmt. Div., Geographic Info. and Stat. Section
LAND USE / TOPO MAP - JIABONG	DENR Reg. VIII, Planning & Mgmt. Div., Geographic Info. and Stat. Section
LAND USE MAP - PROVINCE OF NORTHERN SAMAR	Wesamar GIS Unit
LAND USE MAP - SAMAR ISLAND	Wesamar GIS Unit
LAND USE MAP - WESTERN SAMAR	Wesamar GIS Unit
LAPAZ COMMUNAL IRRIGATION SYSTEM	NIA
LAS NAVAS, N. SAMAR	MUNICIPALITY

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Appendix A (continued)

TITLE	NOTES	TYPE	SIZE	SUBSET
(CONTRACT REFORESTATION PROJECTS)			XL	
(EASTERN SAMAR - Central Part) Land Classification	annotated w/ roads & bgys		XL	
(EASTERN SAMAR - Northern Part) Land Classification	annotated w/ roads & bgys		XL	
(EASTERN SAMAR - Southern Part) Land Classification	annotated w/ roads & bgys		XL	
(FRA TRANSECT)	annotated w/ transect	TOPO	M	
(GEOLOGIC MAP)		manual	L	
(NORTHEAST TIP)			S	Barangay
(NORTHERN SAMAR ISLANDS)		.PRJ	S	SIBP/SAMBIO
BARANGAY INDEX MAP			S	Barangay
BARANGAY INDEX MAP, ALLEN, NORTHERN SAMAR			S	
BARANGAY MAP		.PRJ	S	SIBP/SAMBIO
BASE MAP SHOWING THE ADMINISTRATIVE JURISDICTION OF PENRO SAMAR	annotated		XL	
BASEY OLD-GROWTH FOREST RESERVE			S	Protected Areas
BASEY RESIDUAL FOREST RESERVE			S	Protected Areas
BOBON		TOPO	M	
CALAPI COMMUNAL IRRIGATION SYSTEM			S	Irrigation
CALBIGA CAVES PROTECTED LANDSCAPE			S	Protected Areas
CAMARBUAN COMMUNAL IRRIGATION PROJECT	2 copies		S	Irrigation
CAPUL		TOPO	M	
CASANDIG COMMUNAL IRRIGATION PROJECT	2 copies		S	Irrigation
CATARMAN		TOPO	M	
CATUBIG IP (Irrigation Project)			XL	Irrigation
CATUBIG VALLEY IRRIGATION DEVELOPMENT PROJECT			L	Irrigation
EXISTING GENERAL LAND USE MAP 1989			S	Barangay
FIGURE C-8: GROUNDWATER AVAILABILITY MAP, WATER RESOURCES REGION VIII		.PRJ	S	SIBP/SAMBIO
FORMER TIMBER LICENSES		.PRJ	S	SIBP/SAMBIO
GENERAL LAND USE PLAN - LOPE DE VEGA			S	Barangay
GENERAL LAND USE PLAN - SAN ROQUE			S	Barangay
GENOLGAN		TOPO	M	
GEO-HAZARD MAP - SAMAR ISLAND		.PRJ	S	SIBP/SAMBIO
GEO-HAZARD MAP - WESTERN SAMAR		.CDR	L	
GEOLOGIC HAZARD MAP - LORENTE		.PRJ	S	WS/Veg
GEOLOGICAL/GIOMORPHOLOGICAL MAP - WESTERN SAMAR		.CDR	L	
HINIKAAN-KARANAS COMMUNAL IRRIGATION PROJECT			S	Irrigation
INDICATIVE MANAGEMENT ZONES		.PRJ	S	SIBP/SAMBIO
INDICATIVE MANAGEMENT ZONES, PROPOSED SAMAR ISLAND NATURAL PARK		.PRJ	S	SIBP/SAMBIO
INFRASTRUCTURE PLAN MAP DETAILING THE PPP			S	Barangay
INUNCAYAN COMMUNAL IRRIGATION SYSTEM			S	Irrigation
LAND CLASSIFICATION MAP, MUNICIPALITY OF MONDRAGON		.PRJ	S	SIBP/SAMBIO
LAND USE - PROVINCE OF EASTERN SAMAR		.CDR	L	
LAND USE / DEV. PROJECTS - BASEY		.PRJ	S	Municipal LU/Dev
LAND USE / DEV. PROJECTS - HINABANGAN		.PRJ	S	Municipal LU/Dev
LAND USE / DEV. PROJECTS - JIPAPAD		.PRJ	S	Municipal LU/Dev
LAND USE / DEV. PROJECTS - MARABUT		.PRJ	S	Municipal LU/Dev
LAND USE / TOPO MAP - CALBIGA		.PRJ	S	Municipal LU/Dev
LAND USE / TOPO MAP - JIABONG		.PRJ	S	Municipal Topo/Veg
LAND USE MAP - PROVINCE OF NORTHERN SAMAR		.CDR	L	
LAND USE MAP - SAMAR ISLAND		.CDR	L	
LAND USE MAP - WESTERN SAMAR		.CDR	L	
LAPAZ COMMUNAL IRRIGATION SYSTEM			S	Irrigation
LAS NAVAS, N., SAMAR			S	Barangay

Appendix A (continued)

TITLE	CLASSIFICATION	PROJECTION	GRID	TICS	COORDS	SCALE (1:xxK)	BAR
(CONTRACT REFORESTATION PROJECTS)	PRJ						
(EASTERN SAMAR - Central Part) Land Classification	POL			Y	DMS	50	
(EASTERN SAMAR - Northern Part) Land Classification	POL			Y	DMS	50	Y
(EASTERN SAMAR - Southern Part) Land Classification	POL			Y	DMS	50	
(ERA TRANSECT)	PRJ	TM		Y	DMS	50	Y
(GEOLOGIC MAP)	PRJ						
(NORTHEAST TIP)	POL						
(NORTHERN SAMAR ISLANDS)	POL						
BARANGAY INDEX MAP	POL						
BARANGAY INDEX MAP, ALLEN, NORTHERN SAMAR	POL						
BARANGAY MAP	POL					500	
BASE MAP SHOWING THE ADMINISTRATIVE JURISDICTION OF PENRO SAMAR	PRJ			Y	DMS	100	Y
BASEY OLD-GROWTH FOREST RESERVE	PA			Y	DMS	50	
BASEY RESIDUAL FOREST RESERVE	PA			Y	DMS	50	
BOBON	POL	TM	UTM	Y	meters	50	Y
CALAPI COMMUNAL IRRIGATION SYSTEM	PRJ					20	
CALBIGA CAVES PROTECTED LANDSCAPE	PA			Y	DMS	125	
CAMARBUAN COMMUNAL IRRIGATION PROJECT	PRJ						
CAPUL	POL	TM	UTM	Y	meters	50	Y
CASANDIG COMMUNAL IRRIGATION PROJECT	PRJ					10	
CATARMAN	POL	TM	UTM	Y	meters	50	Y
CATUBIG IP (Irrigation Project)	PRJ					50	
CATUBIG VALLEY IRRIGATION DEVELOPMENT PROJECT	PRJ						
EXISTING GENERAL LAND USE MAP 1989	LU						
FIGURE C-8: GROUNDWATER AVAILABILITY MAP, WATER RESOURCES REGION VIII	PRJ			Y	DMS		Y
FORMER TIMBER LICENSES	PRJ			Y	DMS	1,200	Y
GENERAL LAND USE PLAN - LOPE DE VEGA	LU						
GENERAL LAND USE PLAN - SAN ROQUE	LU						
GENOLGAN	POL	TM	UTM	Y	meters	50	Y
GEO-HAZARD MAP - SAMAR ISLAND	PRJ			Y	DMS	800	Y
GEO-HAZARD MAP - WESTERN SAMAR	PRJ					175	
GEOLOGIC HAZARD MAP - LLORENTE	LU					150	
GEOLOGICAL/GEOMORPHOLOGICAL MAP - WESTERN SAMAR	PRJ					175	
HINIKAAAN-KARANAS COMMUNAL IRRIGATION PROJECT	PRJ						
INDICATIVE MANAGEMENT ZONES	PRJ					800	
INDICATIVE MANAGEMENT ZONES, PROPOSED SAMAR ISLAND NATURAL PARK	PRJ					800	Y
INFRASTRUCTURE PLAN MAP DETAILING THE PFPF	PRJ						
INUNGAYAN COMMUNAL IRRIGATION SYSTEM	PRJ					5.5	
LAND CLASSIFICATION MAP, MUNICIPALITY OF MONDRAGON	LU					800	Y
LAND USE - PROVINCE OF EASTERN SAMAR	LU				DMS	225	Y
LAND USE / DEV. PROJECTS - BASEY	LU					200	
LAND USE / DEV. PROJECTS - HINABANGAN	LU					180	
LAND USE / DEV. PROJECTS - JIPAPAD	LU					130	
LAND USE / DEV. PROJECTS - MARABUT	LU					100	
LAND USE / TOPO MAP - CALBIGA	LU					150	
LAND USE / TOPO MAP - HABONG	LU					100	
LAND USE MAP - PROVINCE OF NORTHERN SAMAR	LU				DMS	150	Y
LAND USE MAP - SAMAR ISLAND	LU					225	
LAND USE MAP - WESTERN SAMAR	LU					175	
LAPAZ COMMUNAL IRRIGATION SYSTEM	PRJ					20	Y
LAS NAVAS, N. SAMAR	POL						

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Appendix A (continued)

TITLE	SOURCE
LAVEZARES	AMS 3857-I
LAWAAN COMMUNAL IRRIGATION PROJECT	NIA
LIMESTONE / LOGGING ROAD & ABOVE 500 ELEV.	DENR Reg. VIII, Planning & Mgmt. Div., Geographic Info. and Stat. Section
LIMESTONE AND LOGGING ROAD MAP	DENR Reg. VIII, Planning & Mgmt. Div., Geographic Info. and Stat. Section
LOCATION MAP OF PRA SESSIONS	DENR Reg. VIII, Planning & Mgmt. Div., Geographic Info. and Stat. Section
LOGGING CONCESSIONER	DENR Reg. VIII, Planning & Mgmt. Div., Geographic Info. and Stat. Section
LOOG COMMUNAL IRRIGATION SYSTEM	NIA
MALAJOG	AMS 3856-II
MAP OF BUIOSAO PROTECTED LANDSCAPE	
MAP OF JICONTOL NATURAL PARK	
MAP OF LINAL-AN WATERSHED FOREST RESERVE	
MAP OF LOOG WATERSHED FOREST RESERVE	
MAP OF MT. HURAW PROTECTED LANDSCAPE	
MAP OF MUNICIPALITY OF LAPINIG	
MAP OF NORTHERN SAMAR	
MAP OF NORTHERN SAMAR	
MAP OF PARANAS PROTECTED LANDSCAPE	
MAP OF PROTECTED AREA WITHIN THE SAMAR ISLAND FOREST RESERVE	DENR Reg. VIII, Planning & Mgmt. Div., Geographic Info. and Stat. Section
MAP OF REGION 7 & 8	NIA
MAP OF SAMAR ISLAND	DENR Reg. VIII, Planning & Mgmt. Div., Geographic Info. and Stat. Section
MAP OF SAMAR PROVINCE (Western Samar)	DPWH District Engineer's Office
MAP OF SAN VICENTE	
MAP OF SOHOTON NATURAL BRIDGE N.P.	
MAP OF WESTERN SAMAR	
MAP SHOWING THE ADMINISTRATIVE JURISDICTION AND THE DIFFERENT EXISTING	
DEVELOPMENT PROJECTS OF CENR OFFICE, BORONGAN, EAST SAMAR	CENRO - Borongan
MAP SHOWING THE FIRE-PRONE AREAS	PENRO - E. SAMAR
MAP: CALBAYOG PAN-AS HAYIBAN PROTECTED LANDSCAPE	
MATNOG	AMS 3857-IV
MINES MAP	Wesamar GIS Unit
MINING CLAIMS	DENR Reg. VIII, Planning & Mgmt. Div., Geographic Info. and Stat. Section
MINING CLAIMS W/IN PROPOSED SINP	DENR Reg. VIII, Planning & Mgmt. Div., Geographic Info. and Stat. Section
MUNICIPAL MAP OF CATARMAN	
MUNICIPAL MAP OF CATUBIG, NORTHERN SAMAR	
MUNICIPAL MAP: LAOANG NORTHERN SAMAR	
MUNICIPALITY OF GAMAY, PROVINCE OF NORTHERN SAMAR	
MUNICIPALITY OF MAPANAS	
MUNICIPALITY OF ROSARIO	
MUNICIPALITY OF SAN ANTONIO SHOWING MAPPING UNITS	
MUNICIPALITY OF VICTORIA	
NAPURO COMMUNAL IRRIGATION PROJECT	NIA
NIPAS AREAS WITHIN THE SIPA	DENR Reg. VIII, Planning & Mgmt. Div., Geographic Info. and Stat. Section
PACO COMMUNAL IRRIGATION PROJECT	NIA
PAMBUJAN	AMS 3957-I
PANARUAN COMMUNAL IRRIGATION SYSTEM	NIA
PATAG-TABUCAN COMMUNAL IRRIGATION SYSTEM	NIA

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Appendix A (continued)

TITLE	NOTES	TYPE	SIZE	SUBSET	MEDIUM
LAVEZARES	MUNICIPALITY	TOPO	M		original
LAWAAN COMMUNAL IRRIGATION PROJECT	COMMUNAL IRRIGATION		S	Irrigation	blueprint
LIMESTONE / LOGGING ROAD & ABOVE 500 ELEV.	WATERSHED	.PRJ	S	WS/Veg	plain
LIMESTONE AND LOGGING ROAD MAP	WATERSHED	.PRJ	S	WS/Veg	plain
LOCATION MAP OF PRA SESSIONS	mun bnd, SINP, rds (natl), mun pt, PRA site	.PRJ	S		plain
LOGGING CONCESSIONER	ISLAND	.PRJ	S	SIBP/SAMBIO	plain
LOOG COMMUNAL IRRIGATION SYSTEM	COMMUNAL IRRIGATION		S	Irrigation	blueprint
MALAJOG	MUNICIPALITY	TOPO	M		original
MAP OF BULOSAO PROTECTED LANDSCAPE	PROTECTION AREA		S	Protected Areas	xerox
MAP OF JICONTOL NATURAL PARK	PROTECTION AREA		S	Protected Areas	xerox
MAP OF LINAL-AN WATERSHED FOREST RESERVE	PROTECTION AREA		S	Protected Areas	xerox
MAP OF LOOG WATERSHED FOREST RESERVE	PROTECTION AREA		S	Protected Areas	xerox
MAP OF MT. HURAW PROTECTED LANDSCAPE	PROTECTION AREA		S	Protected Areas	xerox
MAP OF MUNICIPALITY OF LAPINIG	MUNICIPALITY		S	Barangay	xerox
MAP OF NORTHERN SAMAR	PROVINCE		XL		blueprint
MAP OF NORTHERN SAMAR	PROVINCE		S	Barangay	xerox
MAP OF PARANAS PROTECTED LANDSCAPE	PROTECTION AREA		S	Protected Areas	xerox
MAP OF PROTECTED AREA WITHIN THE SAMAR ISLAND FOREST RESERVE	ISLAND	.PRJ	S	SIBP/SAMBIO	plain
MAP OF REGION 7 & 8	ISLAND		M	Irrigation	blueprint
MAP OF SAMAR ISLAND	annotated w/ soils		S		xerox
MAP OF SAMAR PROVINCE (Western Samar)	Includes northwestern Islands		XL		blueprint
MAP OF SAN VICENTE	MUNICIPALITY		S	Barangay	xerox
MAP OF SOHOTON NATURAL BRIDGE N.P.	PROTECTION AREA		S	Protected Areas	xerox
MAP OF WESTERN SAMAR	2 sheets w/ barangays		S	MISC	xerox
MAP SHOWING THE ADMINISTRATIVE JURISDICTION AND THE DIFFERENT EXISTING DEVELOPMENT PROJECTS OF CENR OFFICE, BORONGAN, EAST SAMAR	annotated		XL		blueprint
MAP SHOWING THE FIRE-PRONE AREAS	PROVINCE		M		blueprint
MAP: CALBAYOG PAN-AS HAYIBAN PROTECTED LANDSCAPE	PROTECTION AREA		S	Protected Areas	xerox
MATNOG	MUNICIPALITY	TOPO	M		original
MINES MAP	ISLAND	.CDR	L		vellum
MINING CLAIMS	ISLAND	.PRJ	S	SIBP/SAMBIO	plain
MINING CLAIMS WIN PROPOSED SINP	ISLAND	.PRJ	S	SIBP/SAMBIO	plain
MUNICIPAL MAP OF CATARMAN	MUNICIPALITY		S	Barangay	xerox
MUNICIPAL MAP OF CATUBIG, NORTHERN SAMAR	MUNICIPALITY		S	Municipality	xerox
MUNICIPAL MAP: LAOANG NORTHERN SAMAR	2 copies		S	Municipality	xerox
MUNICIPALITY OF CAMAY, PROVINCE OF NORTHERN SAMAR	MUNICIPALITY		S	Barangay	blueprint
MUNICIPALITY OF MAPANAS	MUNICIPALITY		S	Barangay	xerox
MUNICIPALITY OF ROSARIO	MUNICIPALITY		S	Municipality	xerox
MUNICIPALITY OF SAN ANTONIO SHOWING MAPPING UNITS	MUNICIPALITY		S	Barangay	xerox
MUNICIPALITY OF VICTORIA	MUNICIPALITY		S	Barangay	xerox
NAPURO COMMUNAL IRRIGATION PROJECT	COMMUNAL IRRIGATION		S	Irrigation	blueprint
NIPAS AREAS WITHIN THE SIPA	ISLAND	.PRJ	S	SIBP/SAMBIO	plain
PACO COMMUNAL IRRIGATION PROJECT	COMMUNAL IRRIGATION		S	Irrigation	blueprint
PAMBUJAN	MUNICIPALITY	TOPO	M		original
PANARUAN COMMUNAL IRRIGATION SYSTEM	annotated		S	Irrigation	blueprint
PATAG-TABUCAN COMMUNAL IRRIGATION SYSTEM	COMMUNAL IRRIGATION		S	Irrigation	blueprint

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Appendix A (continued)

TITLE	CLASSIFICATION	PROJECTION	GRID	TICS	COORDS	SCALE (1:xxK)	BAR
LAVEZARES	POL	TM	UTM	Y	meters	50	Y
LAWAAN COMMUNAL IRRIGATION PROJECT	PRJ					20	
LIMESTONE / LOGGING ROAD & ABOVE 500 ELEV.	LU					250	
LIMESTONE AND LOGGING ROAD MAP	LU					200	
LOCATION MAP OF PRA SESSIONS	POL					800	Y
LOGGING CONCESSIONER	PRJ				DMS	1,100	Y
LOOG COMMUNAL IRRIGATION SYSTEM	PRJ					10	
MALAJOG	POL	TM	UTM	Y	meters	50	Y
MAP OF BULOSAO PROTECTED LANDSCAPE	PA			Y	DMS	50	
MAP OF JICONTOL NATURAL PARK	PA			Y	DMS	400	Y
MAP OF LINAL-AN WATERSHED FOREST RESERVE	PA			Y	DMS	100	Y
MAP OF LOOG WATERSHED FOREST RESERVE	PA			Y	DMS	50	Y
MAP OF MT. HURAW PROTECTED LANDSCAPE	PA			Y	DMS	50	
MAP OF MUNICIPALITY OF LAPINIG	POL						
MAP OF NORTHERN SAMAR	POL						
MAP OF NORTHERN SAMAR	POL						
MAP OF PARANAS PROTECTED LANDSCAPE	PA			Y	DMS	60	
MAP OF PROTECTED AREA WITHIN THE SAMAR ISLAND FOREST RESERVE	PA					800	
MAP OF REGION 7 & 8	POL						
MAP OF SAMAR ISLAND	POL			Y	DMS	1,200	Y
MAP OF SAMAR PROVINCE (Western Samar)	POL			Y	DMS	100	
MAP OF SAN VICENTE	POL						
MAP OF SOHOTON NATURAL BRIDGE N.P.	PA			Y	DMS	50	Y
MAP OF WESTERN SAMAR	POL						
MAP SHOWING THE ADMINISTRATIVE JURISDICTION AND THE DIFFERENT EXISTING DEVELOPMENT PROJECTS OF CENR OFFICE, BORONGAN, EAST SAMAR	PRJ					50	
MAP SHOWING THE FIRE-PRONE AREAS	PRJ					250	
MAP: CALBAYOG PAN-AS HAYIBAN PROTECTED LANDSCAPE	PA			Y	DMS	60	
MATNOG	POL	TM	UTM	Y	meters	50	Y
MINES MAP	PRJ						Y
MINING CLAIMS	PRJ					800	
MINING CLAIMS W/IN PROPOSED SINP	PRJ					800	Y
MUNICIPAL MAP OF CATARMAN	POL						
MUNICIPAL MAP OF CATUBIG, NORTHERN SAMAR	POL						
MUNICIPAL MAP: LAOANG NORTHERN SAMAR	POL					900	
MUNICIPALITY OF GAMAY, PROVINCE OF NORTHERN SAMAR	POL						
MUNICIPALITY OF MAPANAS	POL						
MUNICIPALITY OF ROSARIO	POL					800	Y
MUNICIPALITY OF SAN ANTONIO SHOWING MAPPING UNITS	POL						
MUNICIPALITY OF VICTORIA	POL						
NAPURO COMMUNAL IRRIGATION PROJECT	PRJ					10	
NIPAS AREAS WITHIN THE SIPA	PA					800	
PACO COMMUNAL IRRIGATION PROJECT	PRJ					10	
PAMBUJAN	POL	TM	UTM	Y	meters	50	Y
PANARUAN COMMUNAL IRRIGATION SYSTEM	PRJ					8	Y
PATAG-TABUCAN COMMUNAL IRRIGATION SYSTEM	PRJ					10	

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Appendix A (continued)

TITLE	COVERAGE	PARTICULARS
POBLACION MAP OF CATARMAN, N. SAMAR	MUNICIPALITY	CATARMAN
PROPOSED BIRI BALICUATRO ISLAND PROTECTED SEASCAPE	PROTECTION AREA	
PROPOSED MAP OF SINP INDICATIVE MANAGEMENT ZONE	ISLAND	
PROVINCIAL IRRIGATION DEVELOPMENT MAP - EASTERN SAMAR PROVINCE	PROVINCE	SAMAR-E
PROVINCIAL IRRIGATION DEVELOPMENT MAP - EASTERN SAMAR PROVINCE	PROVINCE	SAMAR-E
PROVINCIAL MAP	PROVINCE	SAMAR-E
PROVINCIAL ROAD NETWORK	MUNICIPALITY	CATBALOGAN
REGION VIII: ROAD MAP	REGION	SAMAR-LEYTE
REGIONAL MAP - EASTERN VISAYAS REGION	REGION	VISAYAS-E
REGIONAL MAP - EASTERN VISAYAS REGION	REGION	VISAYAS-E
ROAD MAP 1980, 1990	MUNICIPALITY	SAN ISIDRO
ROAD MAP OF SAMAR PROVINCE	ISLAND	
ROCKY AND LIMESTONE MAP	ISLAND	(partial)
SAMAR BAUXITE MINERAL RESERVATION	ISLAND	
SAMAR ISLAND LAND CLASSIFICATION MAP	ISLAND	
SAMAR ISLAND MAJOR WATERSHED	ISLAND	
SAMAR ISLAND MAP SHOWING THE MUNICIPAL BOUNDARIES	ISLAND	
SAMBIO FOREST RESOURCE ASSESSMENT TRANSECT LINE	ISLAND	
SAMBIO WATER SAMPLING STATIONS	ISLAND	
SAN BERNARDINO ISLANDS	MUNICIPALITY	SAN BERNARDINO ISLANDS
SAN ISIDRO	MUNICIPALITY	SAN ISIDRO
SAN JUAQUIN	MUNICIPALITY	SAN JUAQUIN
SAN PEDRO CANDAYA COMMUNAL IRRIGATION PROJECT	COMMUNAL IRRIGATION	SAN PEDRO CANDAYA
SAN ROQUE COMMUNAL IRRIGATION PROJECT	COMMUNAL IRRIGATION	SAN ROQUE
SANTO NINO	MUNICIPALITY	SANTO NINO
SIBP PROJECT AREA	ISLAND	
SKETCH MAP OF MARINE AND RECREATIONAL PARK	MUNICIPALITY	CALBAYOG CITY
SKETCH MAP OF PROPOSED MAQUEDA PROTECTED SEASCAPE / LANDSCAPE	PROTECTION AREA	
SOIL AND LAND USE MAP	PROVINCE	SAMAR-E
SOIL CLASSIFICATION MAP	ISLAND	
SOIL MAP - GANDARA WATERSHED	WATERSHED	GANDARA
SOIL MAP - PAMBUJAN WATERSHED	WATERSHED	PAMBUJAN
SOIL MAP - WESTERN SAMAR	PROVINCE	SAMAR-W
SOILS PHYSIOGRAPHY MAP, LAND RESOURCES EVALUATION PROJECT	PROVINCE	SAMAR-N
STRATEGIC AGRICULTURE AND FISHERIES DEVELOPMENT ZONE MAP - EASTERN SAMAR	PROVINCE	SAMAR-E
STRATEGIC AGRICULTURE AND FISHERIES DEVELOPMENT ZONE MAP - NORTHERN SAMAR	PROVINCE	SAMAR-N

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Appendix A (continued)

TITLE	SOURCE
POBLACION MAP OF CATARMAN, N. SAMAR	MUNICIPALITY
PROPOSED BIRI BALICUATRO ISLAND PROTECTED SEASCAPE	PROTECTION AREA
PROPOSED MAP OF SINP INDICATIVE MANAGEMENT ZONE	DENR Reg. VIII, Planning & Mgmt. Div., Geographic Info. and Stat. Section
PROVINCIAL IRRIGATION DEVELOPMENT MAP - EASTERN SAMAR PROVINCE	NIA
PROVINCIAL IRRIGATION DEVELOPMENT MAP - EASTERN SAMAR PROVINCE	NIA
PROVINCIAL MAP	PROVINCE
PROVINCIAL ROAD NETWORK	MUNICIPALITY
REGION VIII: ROAD MAP	DPWH Regional Office No. 08, Construction Division
REGIONAL MAP - EASTERN VISAYAS REGION	REGION
REGIONAL MAP - EASTERN VISAYAS REGION	REGION
ROAD MAP 1900, 1990	MUNICIPALITY
ROAD MAP OF SAMAR PROVINCE	ISLAND
ROCKY AND LIMESTONE MAP	DENR Reg. VIII, Planning & Mgmt. Div., Geographic Info. and Stat. Section
SAMAR BAUXITE MINERAL RESERVATION	PCCS 2520, 2525
SAMAR ISLAND LAND CLASSIFICATION MAP	Wesamar GIS Unit
SAMAR ISLAND MAJOR WATERSHED	DENR Reg. VIII, Planning & Mgmt. Div., Geographic Info. and Stat. Section
SAMAR ISLAND MAP SHOWING THE MUNICIPAL BOUNDARIES	Wesamar GIS Unit
SAMBIO FOREST RESOURCE ASSESSMENT TRANSECT LINE	DENR Reg. VIII, Planning & Mgmt. Div., Geographic Info. and Stat. Section
SAMBIO WATER SAMPLING STATIONS	DENR Reg. VIII, Planning & Mgmt. Div., Geographic Info. and Stat. Section
SAN BERNARDINO ISLANDS	AMS 3858-II
SAN ISIDRO	AMS 3857-II
SAN JUAQUIN	AMS 3856-I
SAN PEDRO CANDAYA COMMUNAL IRRIGATION PROJECT	NIA
SAN ROQUE COMMUNAL IRRIGATION PROJECT	NIA
SANTO NINO	AMS 3855-I
SIBP PROJECT AREA	DENR Reg. VIII, Planning & Mgmt. Div., Geographic Info. and Stat. Section
SKETCH MAP OF MARINE AND RECREATIONAL PARK	MUNICIPALITY
SKETCH MAP OF PROPOSED MAQUEDA PROTECTED SEASCAPE / LANDSCAPE	PROTECTION AREA
SOIL AND LAND USE MAP	Ministry of Natural Resources, Bureau of Forest Development, Land Sub-Classificati
SOIL CLASSIFICATION MAP	DENR Reg. VIII, Planning & Mgmt. Div., Geographic Info. and Stat. Section
SOIL MAP - GANDARA WATERSHED	DENR Reg. VIII, Planning & Mgmt. Div., Geographic Info. and Stat. Section
SOIL MAP - PAMBUJAN WATERSHED	DENR Reg. VIII, Planning & Mgmt. Div., Geographic Info. and Stat. Section
SOIL MAP - WESTERN SAMAR	Wesamar GIS Unit
SOILS PHYSIOGRAPHY MAP, LAND RESOURCES EVALUATION PROJECT	Bureau of Soils
STRATEGIC AGRICULTURE AND FISHERIES DEVELOPMENT ZONE MAP - EASTERN SAMAR	BSWM
STRATEGIC AGRICULTURE AND FISHERIES DEVELOPMENT ZONE MAP - NORTHERN SAMAR	BSWM

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Appendix A (continued)

TITLE	NOTES	TYPE	SIZE	SUBSET	MEDIUM
POBLACION MAP OF CATARMAN, N. SAMAR			S	Barangay	xerox
PROPOSED BIRI BALICUATRO ISLAND PROTECTED SEASCAPE			S	Protected Areas	xerox
PROPOSED MAP OF SINP INDICATIVE MANAGEMENT ZONE		.PRJ	S	SIBP/SAMBIO	plain
PROVINCIAL IRRIGATION DEVELOPMENT MAP - EASTERN SAMAR PROVINCE	b/w		L	Irrigation	vellum
PROVINCIAL IRRIGATION DEVELOPMENT MAP - EASTERN SAMAR PROVINCE	b/w		L	Irrigation	xerox
PROVINCIAL MAP			S	Barangay	xerox
PROVINCIAL ROAD NETWORK			S	Barangay	xerox
REGION VIII: ROAD MAP			XL		blueprint
REGIONAL MAP - EASTERN VISAYAS REGION	annotated w/ Arcs		S	Masterlist of Arcs	plain
REGIONAL MAP - EASTERN VISAYAS REGION	annotated w/ Arcs		S	Masterlist of Arcs	plain
ROAD MAP 1980, 1990			S	Barangay	xerox
ROAD MAP OF SAMAR PROVINCE			XL		xerox
ROCKY AND LIMESTONE MAP		.PRJ	S	SIBP/SAMBIO	plain
SAMAR BAUXITE MINERAL RESERVATION	annotated	TOPO	M		xerox
SAMAR ISLAND LAND CLASSIFICATION MAP		.CDR	L		vellum
SAMAR ISLAND MAJOR WATERSHED		.PRJ	S	SIBP/SAMBIO	plain
SAMAR ISLAND MAP SHOWING THE MUNICIPAL BOUNDARIES		.CDR	L		vellum
SAMBIO FOREST RESOURCE ASSESSMENT TRANSECT LINE		.PRJ	S	SIBP/SAMBIO	plain
SAMBIO WATER SAMPLING STATIONS	2 copies	.PRJ	S	SIBP/SAMBIO	plain
SAN BERNARDINO ISLANDS		TOPO	M		original
SAN ISIDRO		TOPO	M		original
SAN JUAQUIN		TOPO	M		original
SAN PEDRO CANDAYA COMMUNAL IRRIGATION PROJECT	2 copies		S	Irrigation	xerox
SAN ROQUE COMMUNAL IRRIGATION PROJECT			S	Irrigation	blueprint
SANTO NINO		TOPO	M		original
SIBP PROJECT AREA	2 copies	.PRJ	S	SIBP/SAMBIO	plain
SKETCH MAP OF MARINE AND RECREATIONAL PARK			S	Protected Areas	xerox
SKETCH MAP OF PROPOSED MAQUEDA PROTECTED SEASCAPE / LANDSCAPE			S	Protected Areas	xerox
SOIL AND LAND USE MAP			XL		blueprint
SOIL CLASSIFICATION MAP		.PRJ	S	SIBP/SAMBIO	plain
SOIL MAP - GANDARA WATERSHED		.PRJ	S	WS/Veg	plain
SOIL MAP - PAMBUJAN WATERSHED		.PRJ	S	WS/Veg	plain
SOIL MAP - WESTERN SAMAR		.CDR	L		vellum
SOILS PHYSIOGRAPHY MAP, LAND RESOURCES EVALUATION PROJECT			M		blueprint
STRATEGIC AGRICULTURE AND FISHERIES DEVELOPMENT ZONE MAP - EASTERN SAMAR			M	SAFDZ	blueprint
STRATEGIC AGRICULTURE AND FISHERIES DEVELOPMENT ZONE MAP - NORTHERN SAMAR			M	SAFDZ	blueprint

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Appendix A (continued)

TITLE	CLASSIFICATION	PROJECTION	GRID	TICS	COORDS	SCALE (1:xx)	BAR
POBLACION MAP OF CATARMAN, N. SAMAR	POL						
PROPOSED BIRI BALICUATRO ISLAND PROTECTED SEASCAPE	PA			Y	DMS	250	
PROPOSED MAP OF SINP INDICATIVE MANAGEMENT ZONE	PA			Y	DMS	1,200	Y
PROVINCIAL IRRIGATION DEVELOPMENT MAP - EASTERN SAMAR PROVINCE	PRJ			Y	DMS	200	
PROVINCIAL IRRIGATION DEVELOPMENT MAP - EASTERN SAMAR PROVINCE	PRJ					200	
PROVINCIAL MAP	POL						
PROVINCIAL ROAD NETWORK	PRJ						
REGION VIII: ROAD MAP	PRJ						
REGIONAL MAP - EASTERN VISAYAS REGION	POL						
REGIONAL MAP - EASTERN VISAYAS REGION	POL						
ROAD MAP 1980, 1990	PRJ						
ROAD MAP OF SAMAR PROVINCE	PRJ					200	Y
ROCKY AND LIMESTONE MAP	LU			Y		700	Y
SAMAR BAUXITE MINERAL RESERVATION	PRJ	TM	UTM	Y	DMS	250	Y
SAMAR ISLAND LAND CLASSIFICATION MAP	LU						Y
SAMAR ISLAND MAJOR WATERSHED	LU					1,200	Y
SAMAR ISLAND MAP SHOWING THE MUNICIPAL BOUNDARIES	POL						Y
SAMBIO FOREST RESOURCE ASSESSMENT TRANSECT LINE	PRJ			Y	DMS	1,200	Y
SAMBIO WATER SAMPLING STATIONS	PRJ					400	
SAN BERNARDINO ISLANDS	POL	TM	UTM	Y	meters	50	Y
SAN ISIDRO	POL	TM	UTM	Y	meters	50	Y
SAN JUAQUIN	POL	TM	UTM	Y	meters	50	Y
SAN PEDRO CANDAYA COMMUNAL IRRIGATION PROJECT	PRJ					10	Y
SAN ROQUE COMMUNAL IRRIGATION PROJECT	PRJ					6	
SANTO NINO	POL	TM	UTM	Y	meters	50	Y
SIBP PROJECT AREA	PRJ					800	
SKETCH MAP OF MARINE AND RECREATIONAL PARK	PA			Y	DMS	50	
SKETCH MAP OF PROPOSED MAQUEDA PROTECTED SEASCAPE / LANDSCAPE	PA			Y	DMS	250	
SOIL AND LAND USE MAP	LU			Y	DMS	50	Y
SOIL CLASSIFICATION MAP	LU			Y	DMS	1,000	Y
SOIL MAP - GANDARA WATERSHED	LU					250	
SOIL MAP - PAMBUJAN WATERSHED	LU					250	
SOIL MAP - WESTERN SAMAR	LU					175	
SOILS PHYSIOGRAPHY MAP, LAND RESOURCES EVALUATION PROJECT	LU			Y	DMS	250	Y
STRATEGIC AGRICULTURE AND FISHERIES DEVELOPMENT ZONE MAP - EASTERN SAMAR	PRJ			Y	DMS	250	Y
STRATEGIC AGRICULTURE AND FISHERIES DEVELOPMENT ZONE MAP - NORTHERN SAMAR	PRJ			Y	DMS	250	Y

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Appendix A (continued)

TITLE	COVERAGE	PARTICULARS
TOPO / LAND USE MAP - BOBON	MUNICIPALITY	BOBON
TOPO / VEGETATIVE COVER MAP - ARTECHE	MUNICIPALITY	ARTECHE
TOPO / VEGETATIVE COVER MAP - BALANGKAYAN	MUNICIPALITY	BALANGKAYAN
TOPO / VEGETATIVE COVER MAP - GIPORLOS	MUNICIPALITY	GIPORLOS
TOPO / VEGETATIVE COVER MAP - HERNANI	MUNICIPALITY	HERNANI
TOPO / VEGETATIVE COVER MAP - JIPAPAD	MUNICIPALITY	JIPAPAD
TOPO / VEGETATIVE COVER MAP - LAWAAN	MUNICIPALITY	LAWAAN
TOPO / VEGETATIVE COVER MAP - LLORENTE	MUNICIPALITY	LLORENTE
TOPO / VEGETATIVE COVER MAP - QUINAPONDAN	MUNICIPALITY	QUINAPONDAN
TRANSECT 1 (CAN-AVID WS)	WATERSHED	CAN-AVID
TRANSECT 2 (SULAT WS)	WATERSHED	SULAT
TRANSECT 3 (BASEY WS)	WATERSHED	BASEY
TUTUBIGAN COMMUNAL IRRIGATION SYSTEM	COMMUNAL IRRIGATION	TUTUBIGAN
VEGETATIVE COVER - SAMAR ISLAND	ISLAND	
VEGETATIVE COVER MAP - ARTECHE	MUNICIPALITY	ARTECHE
VEGETATIVE COVER MAP - BORONGAN	MUNICIPALITY	BORONGAN
VEGETATIVE COVER MAP - CAN-AVID	MUNICIPALITY	CAN-AVID
VEGETATIVE COVER MAP - CAN-AVID WATERSHED	WATERSHED	CAN-AVID
VEGETATIVE COVER MAP - JIPAPAD	MUNICIPALITY	JIPAPAD
VEGETATIVE COVER MAP - LLORENTE	MUNICIPALITY	LLORENTE
VEGETATIVE COVER MAP - MASLOG	MUNICIPALITY	MASLOG
VEGETATIVE COVER MAP - TAFT	MUNICIPALITY	TAFT
VEGETATIVE MAP - CATUBIG WATERSHED	WATERSHED	CATUBIG
VEGETATIVE MAP - DOLORES WATERSHED	WATERSHED	DOLORES
VEGETATIVE MAP - SURIBAO WATERSHED	WATERSHED	SURIBAO
WATERSHED AREAS	ISLAND	
WATERSHED AREAS WITHIN SINP	ISLAND	

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Appendix A (continued)

TITLE	SOURCE
TOPO / LAND USE MAP - BOBON	DENR Reg. VIII, Planning & Mgmt. Div., Geographic Info. and Stat. Section
TOPO / VEGETATIVE COVER MAP - ARTECHE	DENR Reg. VIII, Planning & Mgmt. Div., Geographic Info. and Stat. Section
TOPO / VEGETATIVE COVER MAP - BALANGKAYAN	DENR Reg. VIII, Planning & Mgmt. Div., Geographic Info. and Stat. Section
TOPO / VEGETATIVE COVER MAP - GIPORLOS	DENR Reg. VIII, Planning & Mgmt. Div., Geographic Info. and Stat. Section
TOPO / VEGETATIVE COVER MAP - HERNANI	DENR Reg. VIII, Planning & Mgmt. Div., Geographic Info. and Stat. Section
TOPO / VEGETATIVE COVER MAP - JIPAPAD	DENR Reg. VIII, Planning & Mgmt. Div., Geographic Info. and Stat. Section
TOPO / VEGETATIVE COVER MAP - LAWAAN	DENR Reg. VIII, Planning & Mgmt. Div., Geographic Info. and Stat. Section
TOPO / VEGETATIVE COVER MAP - LLORENTE	DENR Reg. VIII, Planning & Mgmt. Div., Geographic Info. and Stat. Section
TOPO / VEGETATIVE COVER MAP - QUINAPONDAN	DENR Reg. VIII, Planning & Mgmt. Div., Geographic Info. and Stat. Section
TRANSECT 1 (CAN-AVID WS)	PCGS 4055-IV
TRANSECT 2 (SULAT WS)	PCGS 4055-II
TRANSECT 3 (BASEY WS)	PCGS 4053-IV
TUTUBIGAN COMMUNAL IRRIGATION SYSTEM	NIA
VEGETATIVE COVER - SAMAR ISLAND	Wesamar GIS Unit
VEGETATIVE COVER MAP - ARTECHE	DENR Reg. VIII, Planning & Mgmt. Div., Geographic Info. and Stat. Section
VEGETATIVE COVER MAP - BORONGAN	DENR Reg. VIII, Planning & Mgmt. Div., Geographic Info. and Stat. Section
VEGETATIVE COVER MAP - CAN-AVID	DENR Reg. VIII, Planning & Mgmt. Div., Geographic Info. and Stat. Section
VEGETATIVE COVER MAP - CAN-AVID WATERSHED	DENR Reg. VIII, Planning & Mgmt. Div., Geographic Info. and Stat. Section
VEGETATIVE COVER MAP - JIPAPAD	DENR Reg. VIII, Planning & Mgmt. Div., Geographic Info. and Stat. Section
VEGETATIVE COVER MAP - LLORENTE	DENR Reg. VIII, Planning & Mgmt. Div., Geographic Info. and Stat. Section
VEGETATIVE COVER MAP - MASLOG	DENR Reg. VIII, Planning & Mgmt. Div., Geographic Info. and Stat. Section
VEGETATIVE COVER MAP - TAFT	DENR Reg. VIII, Planning & Mgmt. Div., Geographic Info. and Stat. Section
VEGETATIVE MAP - CATUBIG WATERSHED	DENR Reg. VIII, Planning & Mgmt. Div., Geographic Info. and Stat. Section
VEGETATIVE MAP - DOLORES WATERSHED	DENR Reg. VIII, Planning & Mgmt. Div., Geographic Info. and Stat. Section
VEGETATIVE MAP - SURIBAO WATERSHED	DENR Reg. VIII, Planning & Mgmt. Div., Geographic Info. and Stat. Section
WATERSHED AREAS	DENR Reg. VIII, Planning & Mgmt. Div., Geographic Info. and Stat. Section
WATERSHED AREAS WITHIN SINP	DENR Reg. VIII, Planning & Mgmt. Div., Geographic Info. and Stat. Section

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Appendix A (continued)

TITLE	NOTES	TYPE	SIZE	SUBSET	MEDIUM
TOPO / LAND USE MAP - BOBON	DENR Reg. VIII, Planning & Mgmt. Div., Geographic Info. and Stat. Section	.PRJ	S	Municipal Topo/Veg	plain
TOPO / VEGETATIVE COVER MAP - ARTECHE	DENR Reg. VIII, Planning & Mgmt. Div., Geographic Info. and Stat. Section	.PRJ	S	Municipal Topo/Veg	plain
TOPO / VEGETATIVE COVER MAP - BALANGKAYAN	DENR Reg. VIII, Planning & Mgmt. Div., Geographic Info. and Stat. Section	.PRJ	S	Municipal Topo/Veg	plain
TOPO / VEGETATIVE COVER MAP - GIPORLOS	DENR Reg. VIII, Planning & Mgmt. Div., Geographic Info. and Stat. Section	.PRJ	S	Municipal Topo/Veg	plain
TOPO / VEGETATIVE COVER MAP - HERNANI	DENR Reg. VIII, Planning & Mgmt. Div., Geographic Info. and Stat. Section	.PRJ	S	Municipal Topo/Veg	plain
TOPO / VEGETATIVE COVER MAP - JIPAPAD	DENR Reg. VIII, Planning & Mgmt. Div., Geographic Info. and Stat. Section	.PRJ	S	Municipal Topo/Veg	plain
TOPO / VEGETATIVE COVER MAP - LAWVAN	DENR Reg. VIII, Planning & Mgmt. Div., Geographic Info. and Stat. Section	.PRJ	S	Municipal Topo/Veg	plain
TOPO / VEGETATIVE COVER MAP - LLORENTE	DENR Reg. VIII, Planning & Mgmt. Div., Geographic Info. and Stat. Section	.PRJ	S	Municipal Topo/Veg	plain
TOPO / VEGETATIVE COVER MAP - QUINATONDAN	DENR Reg. VIII, Planning & Mgmt. Div., Geographic Info. and Stat. Section	.PRJ	S	Municipal Topo/Veg	plain
TRANSECT 1 (CAN-AVID WS)	annotated	TOPO	S		xerox
TRANSECT 2 (SULAT WS)	annotated	TOPO	S		xerox
TRANSECT 3 (BASEY WS)	annotated	TOPO	S		xerox
TUTUBIGAN COMMUNAL IRRIGATION SYSTEM	2 copies		S	Irrigation	xerox
VEGETATIVE COVER - SAMAR ISLAND	Wesmar GIS Unit	.CDR	I		vellum
VEGETATIVE COVER MAP - ARTECHE	DENR Reg. VIII, Planning & Mgmt. Div., Geographic Info. and Stat. Section	.PRJ	S	Municipal Veg	plain
VEGETATIVE COVER MAP - BORONGAN	DENR Reg. VIII, Planning & Mgmt. Div., Geographic Info. and Stat. Section	.PRJ	S	Municipal Veg	plain
VEGETATIVE COVER MAP - CAN-AVID	DENR Reg. VIII, Planning & Mgmt. Div., Geographic Info. and Stat. Section	.PRJ	S	Municipal Veg	plain
VEGETATIVE COVER MAP - CAN-AVID WATERSHED	DENR Reg. VIII, Planning & Mgmt. Div., Geographic Info. and Stat. Section	.PRJ	S	WS/Veg	plain
VEGETATIVE COVER MAP - JIPAPAD	DENR Reg. VIII, Planning & Mgmt. Div., Geographic Info. and Stat. Section	.PRJ	S	Municipal Veg	plain
VEGETATIVE COVER MAP - LLORENTE	DENR Reg. VIII, Planning & Mgmt. Div., Geographic Info. and Stat. Section	.PRJ	S	Municipal Veg	plain
VEGETATIVE COVER MAP - MASLOG	DENR Reg. VIII, Planning & Mgmt. Div., Geographic Info. and Stat. Section	.PRJ	S	Municipal Veg	plain
VEGETATIVE COVER MAP - TAFT	DENR Reg. VIII, Planning & Mgmt. Div., Geographic Info. and Stat. Section	.PRJ	S	Municipal Veg	plain
VEGETATIVE MAP - CATUBIG WATERSHED	DENR Reg. VIII, Planning & Mgmt. Div., Geographic Info. and Stat. Section	.PRJ	S	WS/Veg	plain
VEGETATIVE MAP - DOLORES WATERSHED	DENR Reg. VIII, Planning & Mgmt. Div., Geographic Info. and Stat. Section	.PRJ	S	WS/Veg	plain
VEGETATIVE MAP - SURIBAO WATERSHED	DENR Reg. VIII, Planning & Mgmt. Div., Geographic Info. and Stat. Section	.PRJ	S	WS/Veg	plain
WATERSHED AREAS	DENR Reg. VIII, Planning & Mgmt. Div., Geographic Info. and Stat. Section	.PRJ	S	SIBP/SAMBIO	plain
WATERSHED AREAS WITHIN SINP	DENR Reg. VIII, Planning & Mgmt. Div., Geographic Info. and Stat. Section	.PRJ	S	SIBP/SAMBIO	plain

Appendix A (continued)

TITLE	CLASSIFICATION	PROJECTION	GRID	TICS	COORDS	SCALE (1:xxK)	BAR
TOPO / LAND USE MAP - BOBON	LU					100	
TOPO / VEGETATIVE COVER MAP - ARTECHE	LU					100	
TOPO / VEGETATIVE COVER MAP - BALANGKAYAN	LU					120	
TOPO / VEGETATIVE COVER MAP - GIPORLOS	LU					80	
TOPO / VEGETATIVE COVER MAP - HERNANI	LU					150	
TOPO / VEGETATIVE COVER MAP - JIPAPAD	LU					100	
TOPO / VEGETATIVE COVER MAP - LAWAAN	LU					100	
TOPO / VEGETATIVE COVER MAP - LLORENTE	LU					150	
TOPO / VEGETATIVE COVER MAP - QUINAPONDAN	LU					100	
TRANSECT 1 (CAN-AVID WS)	PRJ	TM	UTM	Y	DMS	50	N
TRANSECT 2 (SULAT WS)	PRJ	TM	UTM	Y	DMS	50	N
TRANSECT 3 (BASEY WS)	PRJ	TM	UTM	Y	DMS	50	N
TUTUBIGAN COMMUNAL IRRIGATION SYSTEM	PRJ					12	
VEGETATIVE COVER - SAMAR ISLAND	LU						Y
VEGETATIVE COVER MAP - ARTECHE	LU					110	
VEGETATIVE COVER MAP - BORONGAN	LU					170	
VEGETATIVE COVER MAP - CAN-AVID	LU					160	
VEGETATIVE COVER MAP - CAN-AVID WATERSHED	LU					300	
VEGETATIVE COVER MAP - JIPAPAD	LU					120	
VEGETATIVE COVER MAP - LLORENTE	LU					200	
VEGETATIVE COVER MAP - MASLOG	LU					150	
VEGETATIVE COVER MAP - TAFT	LU					120	
VEGETATIVE MAP - CATUBIG WATERSHED	LU					250	
VEGETATIVE MAP - DOLORES WATERSHED	LU					250	
VEGETATIVE MAP - SURIBAO WATERSHED	LU					250	
WATERSHED AREAS	LU					800	
WATERSHED AREAS WITHIN SINP	LU					800	Y

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Appendix C
List of Maps in Digital Form , Collected by SAMBIO

DISK	FILE	EXT	SIZE	DATE
SAMBIO	40_BELOW	AGX	2,416	99 Aug 18
SAMBIO	40_BELOW	AIF	2,300	99 Aug 18
SAMBIO	40_BELOW	AWX	10,752	99 Aug 18
SAMBIO	40_BELOW	LAY	4,336	00 April 08
SAMBIO	ARTETCHE	PRJ	138,272	00 May 30
SAMBIO	BORONGAN	PRJ	137,232	00 May 30
SAMBIO	CADSAMAR	AGF	2,715,976	00 April 13
SAMBIO	CADSAMAR	AGX	96,708	00 April 13
SAMBIO	CADSAMAR	AIF	175,018	00 April 13
SAMBIO	CADSAMAR	AWX	308,736	00 April 13
SAMBIO	CADSAMAR	LAY	106,145	00 May 30
SAMBIO	CAN-AVID	PRJ	137,577	00 May 30
SAMBIO	FORM 1	PRJ	29,266	00 Jan 11
SAMBIO	IMZ	PRJ	121,886	00 May 30
SAMBIO	JIPAPAD	PRJ	137,038	00 May 30
SAMBIO	LLORENTE	PRJ	136,741	00 May 30
SAMBIO	LSHSS	PRJ	174,501	00 May 30
SAMBIO	M_WH2O	PRJ	121,879	00 May 30
SAMBIO	MASLOG	PRJ	136,971	00 May 30
SAMBIO	MINING	AGF	19,493	99 Feb 13
SAMBIO	MINING	AGX	5,056	99 Feb 13
SAMBIO	MINING	AIF	5,439	99 Feb 13
SAMBIO	MINING	AWX	89,088	99 Feb 13
SAMBIO	MINING	LAY	40,794	00 May 30
SAMBIO	MINING	PRJ	162,903	00 May 30
SAMBIO	PRA	PRJ	115,440	00 April 14
SAMBIO	S_BRGY	AGF	16,732	00 Feb 24
SAMBIO	S_BRGY	AGX	29,344	00 Feb 24
SAMBIO	S_BRGY	AIF	47,049	00 Feb 24
SAMBIO	S_BRGY	AWX	23,552	00 Feb 24
SAMBIO	S_BRGY	LAY	2,186	00 Marh 07
SAMBIO	WH2O	LAY	85,143	00 May 30
SIBP 1	DENR	AGF	8,772	99 Jul 16
SIBP 1	DENR	AGX	1,404	99 Jul 16
SIBP 1	DENR	AIF	621	99 Jul 16
SIBP 1	DENR	AWX	12,288	99 Jul 16
SIBP 1	DENR	LAY	4,277	00 Jan 07
SIBP 1	DENSITY	PRJ	42,103	99 March 22
SIBP 1	DOLORES	PRJ	167,917	98 Dec 09
SIBP 1	DOLORES 1	PRJ	167,449	98 Dec 08
SIBP 1	DRAINAGE	PRJ	239,953	00 May 30
SIBP 1	ELEV 1	PRJ	190,014	99 Jun 15
SIBP 1	F_ROUTE 1	PRJ	261,812	00 May 29
SIBP 1	F_ROUTE 2	PRJ	264,840	00 May 29
SIBP 1	FLIGHT	PRJ	187,953	00 May 30
SIBP 1	FMB_SIBP	PRJ	228,744	00 April 14

Appendix C (continued)

DISK	FILE	EXT	SIZE	DATE
SIBP1	GANDARA	PRJ	172,988	98 Dec 07
SIBP1	GENMAC	PRJ	180,597	00 March 18
SIBP1	GEO_HAZ	PRJ	121,027	00 May 29
SIBP1	GIPO R	PRJ	190,512	00 May 29
SIBP1	GRID	AGF	84,657	98 Aug 13
SIBP1	GRID	AGX	77,656	98 Aug 13
SIBP1	GRID	AIF	131,656	98 Aug 13
SIBP1	GRID	AWX	46,080	98 Aug 13
SIBP1	GRID	BNA	118,130	97 April 22
SIBP1	GRID	LAY	2,174	00 Jun 02
SIBP1	GUIUAN	PRJ	204,097	00 May 30
SIBP1	H2O_BDY2	PRJ	277,617	00 May 29
SIBP1	H2O_BDY3	PRJ	353,629	00 May 29
SIBP1	H2O_BAS	PRJ	276,992	99 Jul 10
SIBP1	H2O_BDY1	PRJ	330,804	00 May 29
SIBP1	H2O_CAL	PRJ	319,430	00 May 29
SIBP1	H2O_CATU	PRJ	326,503	00 May 29
SIBP1	H2O_DOLO	PRJ	352,854	00 May 29
SIBP1	H2O_GAN	PRJ	337,796	00 May 29
SIBP1	H2O_LLOR	PRJ	404,463	00 May 29
SIBP1	H2O_PAM	PRJ	360,942	00 May 29
SIBP1	H2O_SURI	PRJ	445,184	00 May 29
SIBP1	H2O_TAFT	PRJ	407,033	00 May 29
SIBP1	HERNANI	PRJ	206,330	00 May 29
SIBP1	HIN_VEG	PRJ	326,555	00 May 29
SIBP1	HINABANG	PRJ	183,327	98 Oct 13
SIBP1	ISF_PRO	AGF	48,268	00 May 10
SIBP1	ISF_PRO	AGX	13,460	00 May 10
SIBP1	ISF_PRO	AIF	20,258	00 May 10
SIBP1	ISF_PRO	AWX	43,008	00 May 10
SIBP1	ISF_PRO	LAY	14,992	00 May 30
SIBP1	ISIDCALB	PRJ	183,284	98 Oct 13
SIBP1	J_VEG	PRJ	282,960	00 May 30
SIBP1	JIABONG	PRJ	206,522	00 Jun 02
SIBP1	JIPAPAD	PRJ	181,322	00 May 29
SIBP1	LASNAVAS	PRJ	181,257	98 Oct 12
SIBP1	LAWAAN	PRJ	176,361	00 May 29
SIBP1	LC	PRJ	85,265	00 May 29
SIBP1	LC1	PRJ	102,228	99 Jun 15
SIBP1	LCOVERJ	PRJ	77,597	00 May 97
SIBP1	LIME	PRJ	184,311	00 May 29
SIBP1	LLORENTE	PRJ	189,926	00 May 29
SIBP1	LOG_ROAD	PRJ	185,292	00 May 29
SIBP1	LOPEDEVE	PRJ	182,464	98 Oct 12
SIBP1	M_CLAIM	PRJ	299,108	00 May 30
SIBP1	MAC_VEG	PRJ	248,238	00 March 18
SIBP1	MAP1	PRJ	178,447	00 May 30
SIBP1	MAP2	PRJ	142,111	99 Jan 19
SIBP1	MAP3	PRJ	142,243	99 Jan 19
SIBP1	MAP4	PRJ	142,307	99 Jan 19
SIBP1	MAP5	PRJ	142,435	99 Jan 19

Appendix C (continued)

DISK	FILE	EXT	SIZE	DATE
SIBP 1	GANDARA	PRJ	172,988	98 Dec 07
SIBP 1	GENMAC	PRJ	180,597	00 March 18
SIBP 1	GEO_HAZ	PRJ	121,027	00 May 29
SIBP 1	GIPO R	PRJ	190,512	00 May 29
SIBP 1	GRID	AGF	84,657	98 Aug 13
SIBP 1	GRID	AGX	77,656	98 Aug 13
SIBP 1	GRID	AIF	131,656	98 Aug 13
SIBP 1	GRID	AWX	46,080	98 Aug 13
SIBP 1	GRID	BNA	118,130	97 April 22
SIBP 1	GRID	LAY	2,174	00 Jun 02
SIBP 1	GUIUAN	PRJ	204,097	00 May 30
SIBP 1	H2O_BDY2	PRJ	277,617	00 May 29
SIBP 1	H2O_BDY3	PRJ	353,629	00 May 29
SIBP 1	H2O_BAS	PRJ	276,992	99 Jul 10
SIBP 1	H2O_BDY1	PRJ	330,804	00 May 29
SIBP 1	H2O_CAL	PRJ	319,430	00 May 29
SIBP 1	H2O_CATU	PRJ	326,503	00 May 29
SIBP 1	H2O_DOLO	PRJ	352,854	00 May 29
SIBP 1	H2O_GAN	PRJ	337,796	00 May 29
SIBP 1	H2O_LLOR	PRJ	404,463	00 May 29
SIBP 1	H2O_PAM	PRJ	360,942	00 May 29
SIBP 1	H2O_SUR1	PRJ	445,184	00 May 29
SIBP 1	H2O_TAFT	PRJ	407,033	00 May 29
SIBP 1	HERNANI	PRJ	206,330	00 May 29
SIBP 1	HIN_VEG	PRJ	326,555	00 May 29
SIBP 1	HINABANG	PRJ	183,327	98 Oct 13
SIBP 1	ISF_PRO	AGF	48,268	00 May 10
SIBP 1	ISF_PRO	AGX	13,460	00 May 10
SIBP 1	ISF_PRO	AIF	20,258	00 May 10
SIBP 1	ISF_PRO	AWX	43,008	00 May 10
SIBP 1	ISF_PRO	LAY	14,992	00 May 30
SIBP 1	ISIDCALB	PRJ	183,284	98 Oct 13
SIBP 1	J_VEG	PRJ	282,960	00 May 30
SIBP 1	JABONG	PRJ	206,522	00 Jun 02
SIBP 1	JIPAPAD	PRJ	181,322	00 May 29
SIBP 1	LASNAVAS	PRJ	181,257	98 Oct 12
SIBP 1	LAWAAN	PRJ	176,361	00 May 29
SIBP 1	LC	PRJ	85,265	00 May 29
SIBP 1	LCT	PRJ	102,228	99 Jun 15
SIBP 1	LCOVERJ	PRJ	77,597	00 May 97
SIBP 1	LIME	PRJ	184,311	00 May 29
SIBP 1	LLORENTE	PRJ	189,926	00 May 29
SIBP 1	LOG_ROAD	PRJ	185,292	00 May 29
SIBP 1	LOPEDEVE	PRJ	182,464	98 Oct 12
SIBP 1	M_CLAIM	PRJ	299,108	00 May 30
SIBP 1	MAC_VEG	PRJ	248,238	00 March 18
SIBP 1	MAP1	PRJ	178,447	00 May 30
SIBP 1	MAP2	PRJ	142,111	99 Jan 19
SIBP 1	MAP3	PRJ	142,243	99 Jan 19
SIBP 1	MAP4	PRJ	142,307	99 Jan 19
SIBP 1	MAP5	PRJ	142,435	99 Jan 19
SIBP 1	MAP6	PRJ	142,439	99 Jan 19

Appendix C (continued)

DISK	FILE	EXT	SIZE	DATE
SIB P2	S_BRGY	AGX	65,424	00 May 11
SIB P2	S_BRGY	AIF	116,837	00 May 11
SIB P2	S_BRGY	AWX	146,944	00 May 11
SIB P2	S_BRGY	LAY	38,281	00 May 30
SIB P2	S_BRGY	PRJ	158,953	99 March 18
SIB P2	S-BRGY1	PRJ	172,883	99 Nov 24
SIB P2	SAM_BIO	PRJ	185,126	00 May 10
SIB P2	SAM_FR	AGF	219,204	97 Apr 16
SIB P92	SAM_FR	AGX	1,316	97 April 16
SIB P2	SAM_FR	AIF	1,205	97 April 16
SIB P2	SAM_FR	AWX	12,288	97 April 16
SIB P2	SAM_FR	LAY	4,338	99 Jun 15
SIB P2	SAM_LCOV	AGF	1,607,628	98 Jun 17
SIB P2	SAM_LCOV	AGX	7,828	98 Jun 17
SIB P2	SAM_LCOV	AIF	37,997	98 Jun 17
SIB P2	SAM_LCOV	AWX	17,920	98 Jun 17
SIB P2	SAM_LCOV	LAY	6,472	00 May 29
SIB P2	SAM_CENR	PRJ	215,976	98 Nov 05
SIB P2	SAM_CONG	PRJ	109,910	98 Nov 05
SIB P2	SAM_H2O	PRJ	206,730	99 April 20
SIB P2	SAM_PENR	PRJ	158,689	00 May 29
SIB P2	SAMPLE	PRJ	36,943	99 Jul 16
SIB P2	SAMSHORE	AGF	1,996,692	97 Jul 01
SIB P2	SAMSHORE	AGX	22,172	97 Jul 01
SIB P2	SAMSHORE	AIF	44,932	97 Jul 01
SIB P2	SAMSHORE	AWX	26,112	97 Jul 01
SIB P2	SAMSHORE	LAY	2,172	97 Jul 01
SIB P2	SAMSHORE	LYR	622	96 Feb 16
SIB P2	SGEO_HAZ	AGF	505,912	99 April 14
SIB P3	SGEO_HAZ	AGX	31,632	99 April 14
SIB P3	SGEO_HAZ	AIF	48,071	99 April 14
SIB P2	SGEO_HAZ	AWX	225,792	99 April 14
SIB P2	SGEO_HAZ	LAY	84,796	00 May 29
SIB P2	SHORE_RP	AGF	214,275	97 Oct 16
SIB P2	SHORE_RP	AGX	70,792	97 Oct 16
SIB P2	SHORE_RP	AIF	364,672	97 Oct 16
SIB P2	SHORE_RP	AWX	56,832	97 Oct 16
SIB P2	SHORE_RP	LAY	2,169	00 Jun 02
SIB P2	SIB_JURI	PRJ	167,413	98 Dec 07
SIB P2	SIBP	AGF	5,097,132	00 April 27
SIB P2	SIBP	AGX	56,008	00 April 27
SIB P2	SIBP	AIF	89,024	00 April 27
SIB P2	SIBP	AWX	197,120	00 April 27
SIB P2	SIBP	LAY	87,520	00 Jun 02
SIB P2	SIBP	PRJ	171,683	00 March 24
SIB P2	SIBP_PRA	PRJ	172,019	00 May 29
SIB P2	SIBP1	PRJ	150,628	98 Oct 08
SIB P2	SIBP2	PRJ	141,875	99 Jun 10
SIB P2	SIBP_ISF	PRJ	101,308	99 March 22
SIB P2	SIBP_JUR	PRJ	156,969	98 Oct 09
SIB P2	SIBP_TOP	PRJ	102,543	98 Sept 25
SIB P2	SIBRIVER	PRJ	231,595	00 May 29
SIB P2	SIFR	PRJ	79,718	99 March 22
SIB P2	SIFR1	PRJ	84,041	99 March 21
SIB P2	SIFR2	PRJ	84,036	99 March 21
SIB P2	SIFR3	PRJ	148,368	98 Oct 29
SIB P2	SILVIOB	PRJ	181,692	98 Oct 12

Appendix C (continued)

DISK	FILE	EXT	SIZE	DATE
SIBP2	SIPA_1	PRJ	355,205	00 May 29
SIBP2	SIPA_3B	PRJ	347,627	00 April 03
SIBP2	SIPA_3C	PRJ	347,586	00 April 03
SIBP2	SIPA_3D	PRJ	347,887	00 April 03
SIBP2	SIPA_3E	PRJ	348,075	00 April 03
SIBP2	SIPA_3F	PRJ	348,623	00 April 03
SIBP2	SIPA_3G	PRJ	349,061	00 April 03
SIBP2	SIPA_3H	PRJ	349,089	00 April 03
SIBP2	SIPA_3I	PRJ	349,335	00 April 03
SIBP2	SIPA1	PRJ	156,852	99 March 19
SIBP2	SIPA2	PRJ	344,793	00 May 29
SIBP2	SIPA3	PRJ	303,720	00 Jan 24
SIBP2	SIPA3-A	PRJ	360,740	00 April 24
SIBP2	SIPA4	PRJ	243,487	00 Jan 21
SIBP2	SIPA2	PRJ	338,508	00 April 12
SIBP2	SIRIVER1	PRJ	156,984	99 Feb 13
SIBP2	SITES	PRJ	138,712	99 March 21
SIBP2	SITES2	PRJ	132,990	99 March 21
SIBP2	SJ_VEG	PRJ	247,247	00 March 18
SIBP2	SJT_CORP	AGF	310,428	99 Feb 04
SIBP2	SJT_CORP	AGX	17,464	99 Feb 04
SIBP2	SJT_CORP	AIF	26,536	99 Feb 04
SIBP2	SJT_CORP	AWX	61,440	99 Feb 04
SIBP2	SJT_CORP	LAY	25,614	00 Jun 02
SIBP2	SJT_CORP	PRJ	56,942	99 Oct 14
SIBP2	SNISIDRO	PRJ	173,425	98 Dec 07
SIBP2	SNJOSEDE	PRJ	174,136	98 Dec 07
SIBP2	SNJULIAN	PRJ	153,972	98 Dec 09
SIBP2	SOHOTON	AGF	38,231	00 May 30
SIBP2	SOHOTON	AGX	4,616	00 May 30
SIBP2	SOHOTON	AIF	5,220	00 May 30
SIBP2	SOHOTON	AWX	66,048	00 May 30
SIBP2	SOHOTON	LAY	27,662	00 Jun 02
SIBP2	SOIL	AGF	992,495	99 Jul 02
SIBP2	SOIL	AGX	27,452	99 Jul 02
SIBP2	SOIL	AIF	41,428	99 Jul 02
SIBP2	SOIL	AWX	169,472	99 Jul 02
SIBP2	SOIL	LAY	74,788	00 May 29
SIBP2	SOIL	PRJ	120,057	00 May 18
SIBP2	SPZ_1	PRJ	354,856	00 May 30

Appendix C (continued)

DISK	FILE	EXT	SIZE	DATE
SIBP2	SPZ_1A	PRJ	355,716	00 May 29
SIBP2	SPZ_2	PRJ	343,276	00 May 29
SIBP2	SPZ_3	PRJ	331,300	00 May 29
SIBP2	S_SIBVEG	PRJ	153,300	00 May 16
SIBP2	STA	PRJ	173,299	98 Dec 07
SIBP2	STAMARGA	PRJ	173,299	98 Dec 07
SIBP2	SULAT	PRJ	153,676	98 Dec 09
SIBP2	TAFT	PRJ	150,009	99 Jun 29
SIBP2	TOPO	AGF	36,003,906	99 Jun 10
SIBP2	TOPO	AGX	1,558,300	99 Jun 10
SIBP2	TOPO	AIF	2,583,361	99 Jun 10
SIBP2	TOPO	ANX	5,263,360	97 Jun 10
SIBP2	TOPO	AWX	1,336,832	99 Jul 01
SIBP2	TOPO	LAY	16,977	00 Jun 02
SIBP2	TOPO	LYR	4,274	97 Jul 01
SIBP2	TOPO	MAP	42,111	95 Jan 13
SIBP2	TOPO	PRJ	36,132	98 Dec 02
SIBP2	TOPO-400	PRJ	51,044	99 March 18
SIBP2	TOPOLINE	AGF	47,652	99 March 24
SIBP2	TOPOLINE	AGX	2,504	99 March 24
SIBP2	TOPOLINE	AIF	2,446	99 March 24
SIBP2	TOPOLINE	AWX	12,288	99 March 24
SIBP2	TOPOLINE	LAY	4,309	00 May 29
SIBP2	TOPOLINE	PRJ	39,909	99 March 24
SIBP2	VEGCO	AGF	1,607,628	98 Sept 03
SIBP2	VEG_SIPA	PRJ	233,357	00 Jan 21
SIBP2	VERSION1	PRJ	140,996	99 Feb 13
SIBP2	VERSION2	PRJ	132,548	99 Jan 20
SIBP2	WRIGHT2	PRJ	167,413	98 Dec 07
WESSAMAR	BACK-UP1	CDR	207,132	00 Jun 08
WESSAMAR	BACK-UP2	CDR	160,240	00 Jun 07
WESSAMAR	BACK-UP3	CDR	1,362,724	00 Jun 07
WESSAMAR	BACK-UP4	CDR	3,095,274	00 May 11
WESSAMAR	BACK-UP5	CDR	938,404	00 May 08
WESSAMAR	BACK-UP6	CDR	631,332	00 May 15
WESSAMAR	BACK-UP7	CDR	1,789,836	00 Jun 06
WESSAMAR	E-USE	CDR	1,792,562	00 Jun 06
WESSAMAR	GRAPHIC1	CDR	18,806	00 Jun 09
WESSAMAR	LAND_C-1	CDR	207,132	00 Jun 08
WESSAMAR	MINES	CDR	159,622	00 June 08
WESSAMAR	N_USE	CDR	1,363,688	00 Jun 07
WESSAMAR	SAM_USE	CDR	4,144,140	00 May 19
WESSAMAR	SAM_USE1	CDR	4,156,278	00 May 31
WESSAMAR	SAMBIO	CDR	938,188	00 May 08
WESSAMAR	VEG	CDR	631,742	00 May 15
WESSAMAR	W_USE	CDR	6,764,294	00 April 27

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