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**Metadata Creation for the
Maryland Geological Survey's
Collection of Aerial Photographs, Part 2
(2012-2013)**

by
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ABSTRACT

The Maryland Geological Survey (MGS or “the Survey”) shares the concerns of other agencies and organizations engaged in geological research – that geoscience collections and data are valuable in their own right, beyond the lifetime of the projects during which they are collected or acquired, and that special efforts are required to preserve them and ensure their accessibility.

In this, its fifth year as a recipient of a National Geological and Geophysical Data Preservation Program (NGGDPP) grant, MGS created metadata for two components of its collection of aerial photography: (1) ~9,000 aerial photographs (9”x9”) flown post-1953 and (2) the entire collection of ~200 enlarged (20”x20”) aerial photos flown in the 1960s and 1970s over Montgomery County, Maryland. The Survey also created digital infrastructure (i.e., scanned) ~5,700 9”x9” aerial photos, all flown in the 1950s.

Independently of the grant, the Survey arranged for two outside collaborators to scan about half of its collection of air photo index maps and created metadata for part of a collection of (non-aerial) shoreline photographs taken between 1948 and 1977. In all, MGS added a total of ~10,500 new records to the U.S. Geological Survey’s (USGS) *ScienceBase Catalog*.

Aerial photographs depict land use and land cover at particular points in time. A time-series of such photographs can reveal detectable, measurable changes and trends in those patterns. Such photography is irreplaceable – once the flight date has passed, ground conditions on that date cannot be replicated or reconstructed. The Survey’s collection of aerial photographs will only grow in usefulness, as land use continues to change, and as a broad range of researchers and managers attempts to reconstruct past usage from these snapshots in time.

Aside from the inherent value of aerial photography, MGS selected the collection for documentation and digitization because: (a) it is one of the Survey’s most frequently used collections, (b) it is a permanent holding for which metadata are incomplete, (c) documenting the collection is the first of several steps that will eventually lead to the photos being scanned, uploaded to the Internet, and permanently preserved, (d) members of the Survey’s Data Preservation Advisory Panel unanimously recommended that this collection be the next one documented, and (e) the project supports a statewide effort to create an electronic archive of historical aerial photographs.

In the course of creating metadata for the collection, MGS again found that (a) collaboration with other agencies, while fruitful, particularly in terms of avoiding duplication of effort, places additional demands on the cooperators, and (b) anticipating the end of the metadata-creation phase of data preservation, the Survey must begin directing its attention to collection accessibility.

MGS has now nearly completed metadata creation for all four components of its aerial photography collection, (b) converted about one-third of the entire collection to digital

imagery, and (c) participated in prototyping a website that will make the aerial photography web accessible.

INTRODUCTION

The Maryland Geological Survey (MGS) houses a large collection of historical aerial photographs of the State, most of which were donated by the Maryland State Highway Administration or its predecessors. To date, the Survey has identified four components, or sub-collections, of its entire aerial photograph collection:

1. The first component, and the bulk of the collection, consists of approximately 24,000 unrectified, black-and-white aerial photos, flown under the auspices of two federal agencies, the U.S. Department of Agriculture (USDA) and the U.S. Geological Survey (USGS). The ~20,000 USDA aerial photographs were flown, county-by-county, during six time periods or “eras” (1936-1938, 1951-1953, 1957-1958, 1963-1964, 1970-1972, and 1979-1980). Recently discovered USGS photographs, in contrast, were flown quadrangle-by-quadrangle.
2. The second component, considered a “special collection,” consists of approximately 500 unrectified, black-and-white, 2’x2’ photographic enlargements, flown over one or both of the State’s two Atlantic coast barrier islands, Fenwick and Assateague Islands, during 13 different time periods between 1952 and 1964.
3. The third component, another special collection, consists of approximately 200 unrectified, black-and-white, 19”x19” photographic enlargements, flown over the Rockville-Laurel area of Montgomery County, Maryland, annually or biannually, on 12 different dates between 1966 and 1974.
4. The fourth component consists of approximately 400, 22”x34” photo-mosaic index maps, dating from 1936-1990, depicting flight lines and frame numbers for both the aerial photos flown for a particular county or section of a county, as well as the 2’x2’ photographic enlargements for the barrier islands.

Last year, as part of the FY2011 NGGDPP grant, MGS created NGGDPP-compliant metadata for about one-third of the first component of the collection – approximately 6,800 9”x 9” photos flown for USDA during the two earliest eras, 1936-1938 and 1951-1953 (Hennessee and Shelton, 2012). The Survey also supplied metadata to the *ScienceBase Catalog* for the entire barrier island special collection (Component 2) and the entire air photo index map collection (Component 4). In developing and submitting metadata for these three collection components, the Survey treated them as three separate collections: *Historical Aerial Photographs of Maryland, 1936-1990*; *Historical Aerial Photographs of Fenwick and Assateague Islands, Maryland, 1952-1964*; and *Historical Air Photo Index Maps of Maryland, 1936-1980*.

As part of this year’s NGGDPP grant, MGS proposed to (a) create metadata for the remaining two-thirds of the collection of 9”x 9” USDA aerial photographs (Component 1), flown after 1953, and (b) scan a minimum of 1,500 photos from the earliest (pre-1960) eras. During the grant period, MGS scanned all of the ~5,700 9”x9” USDA aerial

photographs flown during the 1950s and delivered copies of the digital images to the Johns Hopkins University (JHU) and the Maryland State Archives (MSA). In submitting metadata to *ScienceBase Catalog* for the 9”x 9” aerial photographs, MGS erased and replaced the records that represent the collection *Historical Aerial Photographs of Maryland, 1936-1990*, updating the 1950s records to reflect their having been scanned.

In addition to the proposed work, the Survey also:

- Supplied metadata to the *ScienceBase Catalog* for the entire Montgomery County special collection (Component 3), treating it as a separate collection, *Historical Aerial Photographs of the Rockville-Laurel Area of Montgomery County, Maryland, 1966-1974*.
- Independently of the NGGDPP grant, through cooperative agreements with JHU and MSA, arranged to have the 1936-1938, 1951-1953, and 1957-1958 air photo **index maps** (Component 4) scanned. MGS then updated the *ScienceBase Catalog* to reflect the availability of those scanned images.
- Supplied metadata to the *ScienceBase Catalog* for a separate collection, unrelated to aerial photography, of ~1,300 envelopes of photographs and associated film negatives, which document erosion along tidal reaches of shoreline in Maryland – *Historical Photographs of Tidal Shorelines, Maryland, 1948-1977*.

Table 1 summarizes the status of preservation activities related to the various components of the Survey’s aerial photograph collection. Work completed as part of an NGGDPP grant is indicated by “FY” preceding the year of completion (e.g., FY2012). Work completed independently of NGGDPP funding is indicated by the year alone (e.g., 2012), followed by (J), if the work was supported by The Johns Hopkins University Sheridan Libraries, or (M), if the work was supported by the Maryland State Archives.

| Table 1: Components of the Aerial Photograph Collection for which MGS has created metadata and digital infrastructure (FY2011 and FY2012) | | | | |
|--|-----------------|---------------------------------|------------------------|---|
| Collection component | Metadata | Digital infra-structure* | Collection ID** | Collection name |
| Component 1: Aerial Photographs - Statewide (9”x9”) | | | | |
| 1936-1938 | FY2011 | | | <i>Historical Aerial Photographs of Maryland, 1936-1990</i> |
| 1951-1953 | FY2011 | FY2012 | MGS-28 P1603 | |
| 1957-1958 | FY2012 | FY2012 | | |
| 1963-1964 | FY2012 | | | |
| 1970-1972 | FY2012 | | | |
| 1979-1980 | FY2012 | | | |
| 1981-1990 | FY2012 | | | |
| Component 2: Photographs – Fenwick & Assateague Islands (20”x20”) | | | | |
| Entire sub-collection | FY2011 | 2011 (J) | MGS-34 | <i>Historical Aerial Photographs of Fenwick</i> |

| | | | | |
|--|---------------|-----------------|--------|---|
| | | | | <i>and Assateague Islands, Maryland, 1952-1964</i> |
| Component 3: Aerial Photographs – Montgomery County (19”x19”) | | | | |
| Entire sub-collection | FY2012 | | MGS-36 | <i>Historical Aerial Photographs of the Rockville-Laurel Area, Montgomery County, Maryland, 1966-1974</i> |
| Component 4: Aerial Photograph Index Maps | | | | |
| 1936-1938 | FY2011 | 2012 (J) | MGS-35 | <i>Historical Air Photo Index Maps of Maryland, 1936-1980</i> |
| 1951-1953 | FY2011 | 2012 (M) | | |
| 1957-1958 | FY2011 | 2012 (M) | | |
| 1963-1964 | FY2011 | | | |
| 1970-1972 | FY2011 | | | |
| 1979-1980 | FY2011 | | | |

* (J) = with support from The Johns Hopkins University Sheridan Libraries; (M) = with support from the Maryland State Archives

** MGS-## = Internal MGS Collection ID

P##### = Original National Digital Catalog Collection ID for Maryland (State ID = 435934)

Aerial photographs depict land use and land cover at particular points in time. A time-series of such photographs may reveal detectable, measurable changes in those patterns. Such a collection is irreplaceable – once the flight date has passed, ground conditions on that date cannot be easily replicated or reconstructed, if at all.

The potential usefulness of historic aerial photos is difficult to predict, in part because of their appeal to a broad audience. However, two examples of their past usage are illustrative. One of Maryland’s most prominent physical features is the Chesapeake Bay, the largest estuary in the country. The declining health of the bay over the past half century has been a cause of concern and intensive study among a myriad of federal, state, and local government agencies. One indicator of bay health is the acreage of the bay floor covered by sea grasses, which act as a nursery for a number of aquatic species and buffer the shore from wave-generated erosion. To develop a baseline against which to measure more recent distributions of such grasses, the Maryland Department of Natural Resources used the 1951-1953 aerial photos to delineate their historical distribution.

The second example has to do with the repatriation and eventual reburial of Native American remains held by the Maryland Historical Trust. In seeking a solution to the problem, an archeologist assigned to the case consulted the MGS aerial photo collection and was able to identify the pits – circular areas of disturbed soil - from which the remains had been extracted during the original archeological dig in the 1950s.

The air photo collection will only grow in usefulness, as land use continues to change, and as researchers and managers attempt to reconstruct past usage from these snapshots in time.

Besides the intrinsic value of the collection, a number of other considerations led MGS to select it for documentation. First, with the exception of certain online collections, it is one of the Survey's most frequently used collections. The MGS library, home to the collection, is open to the public during normal business hours. Many of the library's patrons – several hundred annually – request access to the aerial photos.

Second, the collection is in need of rescue. Because of their age and popularity, the photographs are at risk of further damage due to excessive handling. Compounding that problem are the poor conditions under which the photos are stored. Temperature and relative humidity in the library fluctuate widely with the seasons. Some of the photographs have become moldy or mildewed. Ultimately, MGS intends to scan the photographs, post the digital images to the Internet, and remove the photos themselves from active circulation to the Maryland State Archives, which will house the collection in an environment more conducive to its long-term preservation. Documenting and scanning the items in the collection are, thus, the first steps leading to their ultimate preservation.

Third, at its annual meeting in September 2010, the Survey's Data Preservation Advisory Panel discussed the collections remaining to be documented in light of the then upcoming NNGDPP request for proposals. The consensus of the Panel was that, of the MGS collections yet to be documented, the aerial photographs were undoubtedly the collection of greatest interest to the broadest range of users. Making such a collection available to an audience that includes non-geologists might encourage greater support of data preservation efforts at the Survey. One of the Panel members, the director of the Delaware Geological Survey, attested to the widespread use of that state's web-accessible aerial photos by "not only...the geologic community, but land use people in state, county, local government, agriculture, emergency management agencies, coastal program staff, real estate industry, engineering and geological consultants, individual home owners, schools, etc."

Fourth, the project supports a wider state effort to create an electronic archive of historical aerial photographs. Over the past several years, a number of Maryland state agencies have periodically discussed inventorying, scanning, and preserving historical aerial photography held by state and local governments. Partly in response to discussions at the September 2010 meeting of the Survey's Data Preservation Advisory Panel, a co-chair of the State Government Caucus of the Maryland State Geographic Information Committee (MSGIC) reconvened the Historic Aerial Images and Maps Committee. Since then, the Committee has made considerable progress in designing a website that will allow public access to digital aerial photography. In creating NNGDPP metadata and digital infrastructure for its collection, MGS is contributing to this statewide effort. The aerial photography digitized by MGS during the grant period, as well as the index

maps digitized by JHU and MSA, will eventually reside on the *Historic Aerial Images* website.

In summary, then, by creating metadata and digital infrastructure for its historical aerial photo collection, MGS is satisfying criteria outlined in its own *Long-range Data Preservation Plan* (Hennessee, 2009), advancing the permanent preservation of a valuable collection, honoring the considered opinions of an advisory panel that fosters data preservation at the Survey, and contributing to statewide efforts to create an online resource available to a broad user community.

The organization of this year's report follows a format begun several years ago: each collection is discussed in a stand-alone section - an appendix at the end of the report - following a standardized template. Grouping all of the information about a particular collection in one place provides an easy-to-access summary of progress to date and facilitates addressing needs and next steps. In effect, the collection appendices become supplements to the Survey's *Long-Range Data Preservation Plan*. Also, once again, this report serves double duty: to report MGS's progress with respect to the 2012 NGGDPP grant and to document the Survey's other, non-grant-related data preservation activities over the same time period. Having a single, dual-purpose "annual report" facilitates communicating results to other stakeholders, particularly the Survey's staff and the members of the Data Preservation Advisory Panel.

BACKGROUND

Geographically, Maryland is a relatively small state, with a land area of 9,844 square miles and a water area of 623 square miles. But, with a population of nearly 5.8 million people, it is the fifth most densely-populated state in the U.S. (595 people per square mile) (MGS, 2007; U.S. Census Bureau, 2010). The state straddles six geologically diverse physiographic provinces, from the Appalachian Plateau to the Atlantic Continental Shelf, and contains an extensive network of tidal streams and bays, most notably northern Chesapeake Bay. The Atlantic Ocean forms its eastern border.

The state geological survey has been in existence since 1896. The types of geoscience collections held by MGS reflect its mission, as it has changed over the past 117 years. Current research is focused on the geological underpinnings and groundwater resources of the State. However, MGS has retained several collections from the past, when the interests of its staff and the needs of Maryland's citizenry differed from those of today. For instance, although the Survey is no longer actively engaged in paleontological research, MGS has a macrofossil collection that numbers in the hundreds of specimens. As a consequence of its longevity and the diversity of its activities, MGS possesses a wide array of holdings in a variety of formats.

Five years ago, in response to financial incentives offered by the NGGDPP, MGS began to address the long-term preservation of its data and collections in a formalized, systematic way. In 2008, NGGDPP awarded MGS a one-year grant to (1) identify and

broadly described the geoscience collections and data currently in its possession and (2) enter information about the nature, size, condition, and accessibility of those collections and data deemed “permanent” into the Collections Inventory of the National Digital Catalog (Hennessee and Shelton, 2009). Since then, MGS has identified 33 permanent collections: 9 physical collections and 24 derived or indirect data collections. A detailed list of those collections, as well as their status in terms of data preservation, can be found in Appendix 1.

In 2009, NCGDPP awarded MGS a second grant, which enabled the Survey to master metadata creation through the documentation of three of its sediment core collections. Also in 2009, MGS developed a long-range data preservation plan for its non-digital holdings (Hennessee, 2009) and appointed a curator from among its scientific staff. Inspired by the Data Preservation Workshop at Indiana University, MGS established a Data Preservation Advisory Panel composed of outside geologists, archivists, librarians, and archeologists. From its inception, the Advisory Panel has fostered data preservation at MGS, helping to resolve thorny questions, endorsing proposals, and forming partnerships in applying for preservation-related grants.

The third year grant allowed MGS to continue metadata creation for several more of its collections and, as noted in the Introduction, led to a revision in the way that the Survey reports its results. As part of its third-year effort, MGS documented about 20% of the Fenwick and Assateague Island photographs, a pilot project of sorts for its fourth year effort.

Last year, the fourth NCGDPP grant allowed MGS to create metadata for (a) the remaining photographs in the Fenwick and Assateague Island collection, (b) about one-third of its collection of 9” x 9” air photos, and (c) the entire collection of air photo index maps.

OBJECTIVES

Designed to further MGS’s progress in metadata creation and submittal to the *ScienceBase Catalog* and to begin digitizing the oldest aerial photographs in the Survey’s collection, the objectives of the 2012 NCGDPP project, as outlined in the proposal, were as follows:

1. For a subset of one component of the collection - 9”x 9” aerial photographs flown during four eras between 1957 and 1980 - assemble the information needed to develop item-by-item metadata, consistent with the NCGDPP metadata template. Populate an internal Microsoft Access database, AirPhotoIndex.mdb, with metadata describing the items that comprise the photographs, in a format consistent with version 1.0 of the *Metadata Profile for the National Digital Catalog*:
2. Through digital transfer, provide metadata to the *ScienceBase Catalog* for the items that comprise the proposed subset of aerial photographs.

3. Scan a minimum of 1,500 aerial photos from the two earlier (pre-1957) eras (1200 dpi; TIFF format). Supply the digital images to the Maryland State Archives and The Johns Hopkins University library to post, at their discretion, to their respective websites.
4. Submit a final report to the NGGDPP, describing the results, findings, and lessons learned from this year's project.

METADATA CREATION, CONVERSION, AND TRANSFER

POPULATING AN INTERNAL AIR PHOTO INDEX DATABASE

Several years ago, MGS developed and began populating a Microsoft Access database, *AirPhotoIndex.mdb*, with information about the aerial photos and index maps in its collection. The database, stored on the MGS network (Common on 'Mgsdc':/AirPhotoIndex), contains two primary tables, *tblAirPhoto* and *tblIndexMap*, with information about air photos and index maps, respectively. At the onset of this project, the "titles" of all photos depicted on the Survey's air photo index maps had been entered into the database, regardless of whether MGS actually held the photos in its collection. Thus, the first phase of this project entailed entering information about the actual photos that comprise the MGS collection.

In many ways, the information stored in the Air Photo Index database differs in content or format from the fields that comprise NGGDPP-compliant metadata. The internal database includes information pertaining to photo condition, the physical and cultural features depicted on the photo, the ID of the associated air photo index map, the location of the photo (i.e., room, file cabinet, cabinet drawer), etc. – fields not necessarily of interest to *ScienceBase Catalog* users. On the other hand, NGGDPP metadata require that dates be reported in YYYYMMDD format, instead of the MM/DD/YYYY format employed in the Access database. And, the NGGDPP *abstract* field must be constructed, largely by concatenating fields in the internal Access database.

From its very first foray into metadata creation, the Survey adopted an idea similar to one suggested in the NGGDPP instructions, *Preparing Metadata for the National Digital Catalog* (05/15/2009), which provides a worksheet for mapping existing digital data into the metadata fields. For each collection, MGS completes an *NGGDPP Metadata Form* describing the information to be supplied as metadata, including explanations and examples for each metadata field and a list of information sources, as appropriate. The completed forms for the two aerial photograph sub-collections (Components 1 and 3) that the Survey documented this year are included as part of the individual collection reports (Appendices 2-3). (Appendix 4 contains similar information for the shoreline photograph collection.) The remainder of this section discusses some of the more important metadata decisions that the Survey made this year, in the course of documenting components of the aerial photography collection.

Title

For all aerial photographs, MGS used the photo identifier embedded in the upper right corner of the photo itself as the item title. For air photo index maps, the title includes the area and year of coverage, as well as the sheet number.

Geographic Coordinates

For the 9”x 9” photos and the index maps themselves, the Survey reported the geographic coordinates of the centroid of the county over which a photograph was flown or for which an index map was created.

Alternate Geometry

MGS commonly uses the *alternateGeometry* field to document the contents of the *coordinate* field, even though the *alternateGeometry* field is intended for reporting (x, y) coordinates based on other coordinate systems. An example of the MGS version of an *alternateGeometry* field entry might be, “Geographic coordinates (NAD83) represent centroid of Talbot Co., MD, from the U.S. Geological Survey's Geographic Names Information System (GNIS).”

CONVERTING METADATA TABLES AND SUBMITTING FILES TO THE SCIENCEBASE CATALOG

For this year’s documented collections, MGS used the same process it has used in the past to convert Access metadata tables to .csv-formatted files and upload those files to the *ScienceBase Catalog*. Once again, the clear instructions in *Preparing Metadata for the National Digital Catalog* (05/15/2009), coupled with MGS-specific instructions and admonitions for metadata upload, included as an appendix in a previous report (Hennessee and Shelton, 2010), made file submission fairly straightforward. MGS particularly appreciated being able to interact directly with NGGDPP personnel, especially Tamar Norkin, to resolve minor glitches in the process.

VERIFYING THE ACCURACY AND COMPLETENESS OF THE UPLOADED METADATA

MGS verified the completeness and accuracy of the metadata upload. In terms of completeness, MGS checked that the total number of records in each collection, determined from the appropriate internal database table, matched the number uploaded to the *ScienceBase Catalog*. Then, for a subset of records in each collection, MGS verified the accuracy of the uploaded information, that is, MGS verified that the information in the *ScienceBase Catalog* matched the information in the internal database tables.

After verifying the accuracy and completeness of the metadata upload, MGS reviewed and, as needed, revised the associated information contained in the original Collections Inventory. This step is necessary because the exact number of items uploaded may differ from the estimated number reported in the initial description of a collection. Or, metadata are completed for additional items in a collection. Or, as a collection is itemized and documented, the contents of the collection is broadened to include more

kinds of items, or narrowed to include fewer, necessitating a change in the collection description.

DIGITAL INFRASTRUCTURE

This year, MGS scanned all of its ~5,700 9”x9” air photos flown in the 1950s (1952-1953 and 1957-1958), surpassing the proposed number of 1,500. The scanning was done in-house using a plustek OpticPro A320 scanner. Photos were scanned at 1200 dpi to .tif and .jpg formats; file sizes are approximately 125 MB and 12 MB, respectively. Each file name is assigned according to its NGGDPP metadata *title*. In addition, MGS made arrangements with JHU and MSA to scan all of the 1930s and 1950s air photo index maps.

ACCESSIBILITY

Currently, MGS holds all of the photos and index maps that comprise its collection of aerial photography. Library patrons are welcome to access the collection in-house during normal business hours. Once the collection components have been digitized and made available online, MGS plans to transfer the collection in its entirety to MSA for permanent preservation.

Meanwhile, JHU has posted many of the air photo index maps and 9”x9” aerial photographs of Baltimore City and County to its *JScholarship* website. (*Aerial Photography – Other Maryland Counties*, <https://jscholarship.library.jhu.edu/handle/1774.2/36422> [11/30/2013] and *Aerial Photography – Baltimore*, <https://jscholarship.library.jhu.edu/handle/1774.2/32749>, [11/30/2013]). Files in .jpg or .jp2 format are available for immediate download from that site. MGS has copied the same scanned images to its internal Digital Library and transferred the files to MSA, some of which are available through that agency’s *Guide to Government Records*.

RESULTS AND LESSONS LEARNED

MGS exceeded this year’s grant objectives by (1) documenting the remaining items in the proposed sub-collection of 9”x 9” aerial photographs, as well as all of the of Rockville-Laurel aerial photographs, (2) scanning all ~5,700 of the 1950s aerial photos, not just a sub-set of those and (3) documenting a collection of ~1,300 envelopes of tidal shoreline photographs and associated film negatives, not included in the proposal. In all, ~9,000 new, as opposed to replacement, aerial photo records, were uploaded to the *ScienceBase Catalog*, as well as the ~1,300 records associated with the shoreline photo collection. Finally, in a related, but unfunded, effort, MGS collaborated with JHU and MSA to digitize all of the 1930s and 1950s index maps associated with the 9”x9” aerial photographs and make them web-accessible.

The most important lessons learned in the course of the project are as follows:

- In its data preservation efforts, MGS has been trying to form cooperative relationships with other agencies interested in its collections, in large part to avoid costly duplication of effort. Several of those efforts have succeeded, in particular, MGS's collaboration with JHU and MSA to scan aerial photo index maps and Survey publications. Successful as they may be, though, such efforts usually entail new staff obligations and an additional outlay of time (e.g., in tracking the release and return of physical items being scanned by another agency; in ensuring that all collaborators have received copies of digital images; in supplying collaborators with item metadata). Often, a project timeline, affected by other duties and constraints on collaborators, ends up being extended. So, even though the final product may be less costly in terms of actual dollars spent, it generally takes longer to achieve the desired results.
- At the current rate of endeavor, MGS will have completed the metadata creation phase of data preservation for all of its collections within the next few years. In keeping with its long-range data preservation plan, MGS will then turn to making those collections more easily accessible, preferably online. Although MGS has a long-standing web presence, the Survey's website is in need of revamping; staff are currently engaged in an extensive redesign of the site. However, MGS is hampered by inadequate funds to acquire hardware capable of serving digital versions of its paper-based collections, particularly large aerial photograph and map files. For the moment, JHU's *JScholarship* website and MSA's online *Guide to Public Records* are meeting that need. Although such access may satisfy online users, it has the effect of dissociating Survey products from the Survey itself.

NON-GRANT-RELATED PRESERVATION ACTIVITIES

Although the activities described in this section of the report were not directly funded by the NGGDPP, MGS has decided to include this section for two reasons: (1) undertaking the activities was inspired by the Survey's involvement with the NGGDPP and (2) compiling all of the Survey's data preservation activities in one place allows the report to serve double duty, not only as a final report to the NGGDPP, but also as an annual report to MGS's data preservation stakeholders (e.g., MGS staff, members of the MGS Data Preservation Advisory Panel).

The most important non-grant-related activities that MGS undertook this year included:

- Independently of the NGGDPP grant, through cooperative agreements with JHU and MSA, MGS arranged to have its 1936-1938, 1951-1953, and 1957-1958 air photo **index maps** (Component 4) scanned. JHU scanned the 89 1930s index maps, and MSA, scanned the 70 1950s air photo index maps, for a total of 159 digital index maps. JHU posted the scanned images to its *JScholarship* website, and MSA posted the images to its *Electronic Archives*.

Also, as part of the MGS-JHU-MSA collaboration, MSA scanned the all of the reports (tomes) comprising the Survey's Volume, County, and System series, supplying digital images to MGS. MSA has made the digital versions available through its online *Guide to Government Records*.

- MGS documented two of three components of its collection of shoreline photographs of tidewater Maryland: ~1,300 envelopes containing ~4,000 photographs and associated film negatives shot between 1948 and 1977. The Survey submitted the information to the *ScienceBase Catalog*. A third component consisting solely of ~12,000 35-mm slides remains to be documented. A description of the collection, including its location, its storage conditions, and its associated "issues" is included in Appendix 4.
- The Survey continued its compilation of a still-incomplete digital finding aid – essentially metadata – for its many publications, both reports and maps. The finding aid is being utilized in the Survey's website redesign, to facilitate searching and serving digital versions of MGS publications. The MGS curator is working closely with the website design team to ensure Data Preservation database and website compatibility, not only to facilitate the delivery of the Survey's digital publications, but also the delivery of information about other MGS collections.
- At its annual meeting in Fall 2012, the Survey's Data Preservation Advisory Panel encouraged MGS to apply for NGGDPP funding to develop metadata for a newly discovered set of 9"x9" aerial photos and to continue scanning the pre- and post-1950s air photos. With a letter of endorsement from the Advisory Panel, MGS successfully did so.
- MGS remained an active participant on MSGIC's Historical Aerial Images Committee (HAIC). The goals of the HAIC are to locate, digitize, and preserve older aerial photographs and related imagery flown for the State. This year, MSA and the Maryland Environmental Service (MES) developed functional requirements for the Historic Aerial Images website. The two agencies are using the digital images of aerial photographs and associated index maps of Fenwick and Assateague Islands (Component 2 of MGS's collection of aerial photography) to prototype the site. Eventually, all of the Survey's scanned aerial photographs and index maps will reside on this site.

CONCLUSIONS

During the past year, MGS has initiated and/or successfully completed a number of activities in building what it hopes will become a first-rate repository of collections useful to the larger geoscience community. Having created and uploaded metadata for a 13 of its 33 permanent collections to the *ScienceBase Catalog*, MGS now fully understands the process and has developed procedures and collection-level reporting

requirements for documenting that work. The Survey implemented an intensive, in-house plan for scanning its large collection of 9"x9" aerial photographs and digitized nearly four times more photos than proposed. In addition, MGS has embarked on several independent initiatives to digitize and preserve its reports, maps, and several components of its aerial photograph collection not directly supported by NGGDPP. The Survey also completed the metadata creation phase for part of another collection - historical shoreline photographs. In its data preservation efforts, the Survey's next steps are to continue documenting its remaining collections, to seek funding for and prepare all of the collections for long-term preservation, and to continue addressing mechanisms for public access to the collections.

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APPENDIX 1

MGS's Permanent Collections and Their Preservation Status

November 2013

| Table A-1-1: Status of the permanent collections held by MGS, by NCGDPP collection category, as of September 2012 (shaded cells indicate that the activity is complete) | | | | | | | |
|---|---------------------------|--|----------------------|-------------------|------------------------|------------------------|--------------------|
| Collection category | Permanent collections (N) | Items in collection* (N) | Collection inventory | Metadata creation | Digital infrastructure | Internet accessibility | Education/outreach |
| PHYSICAL COLLECTIONS | | | | | | | |
| 1. Auger samples | | | | | | | |
| 2. Fluid samples | | | | | | | |
| 3. Geochemical samples | | | | | | | |
| 4. Hand samples | 2 | | | | | | |
| <i>Maryland Rocks and Minerals</i> (P1510) | | 99 (203) | NCGDPP 2008 | NCGDPP 2010 | | | |
| <i>Exhibition Flasks: Mineral Commodities of Maryland</i> (P1692) | | 38 | NCGDPP 2010 | NCGDPP 2010 | | | |
| 5. Ice cores | | | | | | | |
| 6. Paleontological samples | 1 | | | | | | |
| <i>Maryland Macrofossils</i> (P1518) | | 156 (200) species; 1500 specimens | NCGDPP 2008 | NCGDPP 2010 | | | |
| 7. Rock cores | 1 | | | | | | |
| Rock Cores (P1531) | | 200 | NCGDPP 2008 | (NCGDPP 2010) | | | |

| Table A-1-1: Status of the permanent collections held by MGS, by NGGDPP collection category, as of September 2012 (shaded cells indicate that the activity is complete) | | | | | | | |
|--|----------------------------------|---------------------------------|-----------------------------|--------------------------|-------------------------------|-------------------------------|---------------------------|
| Collection category | Permanent collections (N) | Items in collection* (N) | Collection inventory | Metadata creation | Digital infrastructure | Internet accessibility | Education/outreach |
| 8. Rock cuttings | 1 | | | | | | |
| Rock Cuttings (P1532) | | 200,000 | NGGDPP 2008 | | | | |
| 9. Sediment cores | 4 | | | | | | |
| Coastal Plain Cores (P1507) | | 125 | NGGDPP 2008 | NGGDPP 2009 | | | |
| Atlantic Continental Shelf Cores (P993) | | 282 | NGGDPP 2008 | NGGDPP 2009 | | | |
| Chesapeake Bay Cores (P1648) | | 4,255 | NGGDPP 2009 | NGGDPP 2009 | | | |
| Heavy Minerals, Atlantic Coastal Shelf (P1519) | | 250 | | | | | |
| 10. Sidewall cores | | | | | | | |
| 11. Thin sections and polished sections | | | | | | | |
| 12. Type stratigraphic sections | | | | | | | |
| Subtotal | 9 | | | | | | |
| DERIVED/INDIRECT DATA | | | | | | | |
| 13. Drilling/completion reports | 1 | | | | | | |
| Well Permits and Well Completion Reports, Maryland (P1526) | | 500,000 | NGGDPP 2008 | | | | |
| 14. Drill stem and other tests | 1 | | | | | | |
| Aquifer (Pump) Tests, Maryland Coastal Plain (P1521) | | 262 | NGGDPP 2008 | | | | |
| 15. Field notes | 1 | | | | | | |
| Geology Field Notebooks, Maryland (P1522) | | 70 | NGGDPP 2008 | | | | |

| Table A-1-1: Status of the permanent collections held by MGS, by NGGDPP collection category, as of September 2012 (shaded cells indicate that the activity is complete) | | | | | | | |
|--|----------------------------------|---------------------------------|-----------------------------|-------------------------------|-------------------------------|-------------------------------|---------------------------|
| Collection category | Permanent collections (N) | Items in collection* (N) | Collection inventory | Metadata creation | Digital infrastructure | Internet accessibility | Education/outreach |
| 16. Geochemical data | 1 | | | | | | |
| Maryland Groundwater Quality Data (P1530) | | ? | NGGDPP 2008 | | | | |
| 17. Geophysical data | | | | | | | |
| 18. Lithology logs | 1 | | | | | | |
| Geological (Lithological) Descriptions of Coastal Plain Cores and Well Cuttings, MD and VA (P1527) | | 52 | NGGDPP 2008 | | | | |
| 19. Maps | 1 | | | | | | |
| MGS Maps, including Oversized Inserts in MGS Publications (no USGS ID) | | 1500 | In progress (11/2013) | In progress (11/2013) | | | |
| 20. Paleomagnetic resistivity | | | | | | | |
| 21. Paper reports | 3 | | | | | | |
| Published MGS Reports | | ~500 | In progress (11/2013) | In progress (11/2013) | | | |
| Unpublished MGS Reports (P1553) | | 300 | NGGDPP 2008 | In progress (11/2013) | | | |
| Doctoral Dissertations on Maryland Geology (P1523) | | 28 | NGGDPP 2008 | | | | |
| 22. Petrophysical data | | | | | | | |
| 23. Photographs | 6 | | | | | | |
| <i>Historical Photographs of Tidal Shorelines, Maryland, 1948-1977</i> (P1565) (components: (1) envelopes of photos & assoc. film negatives, (2) slides) | 1 | (1) ~1,300 (2) 12,000 | NGGDPP 2008 | (1) 11/2013 (2) to be done | | | |

| Table A-1-1: Status of the permanent collections held by MGS, by NGGDPP collection category, as of September 2012 (shaded cells indicate that the activity is complete) | | | | | | | |
|--|----------------------------------|---------------------------------|-----------------------------|---|--|-------------------------------|---------------------------|
| Collection category | Permanent collections (N) | Items in collection* (N) | Collection inventory | Metadata creation | Digital infrastructure | Internet accessibility | Education/outreach |
| X-rays & Xeroradiographs of Marine & Estuarine Sediment Cores, MD (P1589) | | 300 | NGGDPP 2008 | | | | |
| <i>Historical Air Photo Index Maps of Maryland 1936-1980</i> | | 395 | NGGDPP 2011 | NGGDPP 2011 | 2012 (JHU & MSA) (159 pre-1960 scanned) | | |
| Historical Aerial Photographs, MD, 1936-1990 (P1603) | | 15,819 (~20,000) | NGGDPP 2008 | NGGDPP 2011 (6,772) 2012 (9,047) | NGGDPP 2012 (5,711 (1950s) scanned) | | |
| <i>Historical Aerial Photographs, Fenwick & Assateague Is., MD, 1952-1964 (P1691)</i> | | 505 | NGGDPP 2010 | NGGDPP 2010 (92), 2011 (413) | 2011 (JHU) (505) | | |
| <i>Historical Aerial Photographs, Rockville-Laurel Area, Montgomery Co., MD, 1966-1974</i> | | 176 | NGGDPP 2012 | NGGDPP 2012 | | | |
| 24. Potential fields | | | | | | | |
| 25. Production history | | | | | | | |
| 26. Routine analysis data | 2 | | | | | | |
| Marine & Estuarine Beach & Bottom Sediment Data (P1612) | | ~50 studies | NGGDPP 2008 | (NGGDPP 2010) | | | |
| Paleontological and Palynological Data Derived from MD Water Wells (P1524) | | ? | NGGDPP 2008 | | | | |
| 27. Scout tickets | | | | | | | |
| 28. Seismic data | 1 | | | | | | |

| Table A-1-1: Status of the permanent collections held by MGS, by NGGDPP collection category, as of September 2012 (shaded cells indicate that the activity is complete) | | | | | | | |
|--|----------------------------------|---------------------------------|-----------------------------|--------------------------|-------------------------------|-------------------------------|---------------------------|
| Collection category | Permanent collections (N) | Items in collection* (N) | Collection inventory | Metadata creation | Digital infrastructure | Internet accessibility | Education/outreach |
| Marine and Estuarine Seismic Profile Prints (P1554) | | 240 | NGGDPP 2008 | | | | |
| 29. Source rock maturity analysis | | | | | | | |
| 30. Special analysis data | | | | | | | |
| 31. Stratigraphic horizons | | | | | | | |
| 32. Surface and airborne data | 3 | | | | | | |
| Bathymetric Surveys, MD Water Bodies (P1547) | | 8 | NGGDPP 2008 | NGGDPP 2010 | | | |
| Elevation Surveys of Arnold, Broad Creek, and Crofton Meadows Well Fields, Anne Arundel Co., MD (P1529) | | 15 | NGGDPP 2008 | | | | |
| Beach Profiles, Coastal Maryland (P1613) | | ? | NGGDPP 2008 | | | | |
| 33. 2-D and 3-D seismic reflection | 1 | | | | | | |
| 2-D Seismic Reflection Profiles, Maryland Coastal Plain (P1520) | | 2 | NGGDPP 2008 | | | | |
| 34. Vertical seismic profiles | | | | | | | |
| 35. Well logs | 2 | | | | | | |
| Geophysical Logs, Western Maryland Deep Wells (P1528) | | 337 | NGGDPP 2008 | NGGDPP 2010 | | | |
| Well Logs, Maryland and Neighboring States (P1525) | | 2,000 | NGGDPP 2008 | | | | |
| Subtotal | 24 | | | | | | |
| Total | 33 | | | | | | |

* Number in parentheses = total number of items held by MGS, vs. number of items for which metadata was reported to the *ScienceBase Catalog*

APPENDIX 2

Historical Aerial Photographs of Maryland, 1936-1990

MGS Collection ID: 28
Original NGGDPP ID: P1603
ScienceBase ID: 4f4e4a94e4b07f02db658dba

November 2013

COLLECTION DESCRIPTION

The largest component of the Survey's collection of aerial photography, this sub-collection consists of approximately 20,000 unrectified, black-and-white aerial photographs flown throughout Maryland, most by the U.S. Department of Agriculture, during several time periods or "eras" (e.g., 1936-1938, 1951-1953, 1957-1958, 1963-1964, 1970-1972, and 1979-1980). Each of the photos in the collection is about 9"x9" in size, most with an approximate scale of 1:20,000. The photographs cover all of the counties in the State, though not always completely. In addition to the photos, several hundred index maps are included in the related sub-collection, *Historical Air Photo Index Maps of Maryland, 1936-1980*.

Tables A2-1 through A2-5 below list the aerial photos, by county, flown during the eras represented in the collection. As of the date of this report, only the aerial photos flown during the 1950s have been scanned.

COLLECTION LOCATION AND STORAGE CONDITIONS

The physical collection of 9"x9" aerial photographs is stored vertically in several file cabinets in the MGS map library (Room 315). Ambient temperature in this windowed, north-facing room at the top of the building fluctuates widely; the space becomes quite warm in summer, despite air-conditioning. Humidity, though not monitored, probably varies, as well.

The collection is accessible to library visitors, who are often left unsupervised to study photos retrieved by an MGS staff member. Visitors are at liberty to photocopy photos of interest, using a photocopier located in the library. MGS asks that they not refile the photos they consult.

Although the photos are fairly well organized and maintained, there is sometimes a delay in refileing photos that have been retrieved for library patrons. Also, MGS employees feel free to borrow photos as the need arises. There is no system in place for checking out and returning borrowed photos.

COLLECTION DOCUMENTATION

The Survey's Data Preservation Database

Several years ago, MGS developed and began populating a Microsoft Access database, AirPhotoIndex.mdb, with information about all of the aerial photos and index maps in its collection. The database, stored on the MGS network (Common on 'Mgsdc':/AirPhotoIndex), contains two primary tables, tblAirPhoto and tblIndexMap, with information about air photos and index maps, respectively.

Once all of the information for photos in the collection was entered into the Air Photo Index database, MGS copied those entries to a table in the Data Preservation Database, tblAirPhotos_InStock_All_20130829, and appended the NNGDPP metadata fields to the table. Another iteration of the table, tblUploadMetadata_P1603_APMD_All_V2_201308b, containing metadata in NNGDPP-compliant format, was uploaded to *ScienceBase*.

ScienceBase Catalog

For aerial photos, the *title* field in aerial photo metadata is a unique identifier consisting of the project area-film negative roll-frame number, which is embedded in the top right corner of each photograph. For the *geographic coordinates* field, MGS assigned the coordinates of the centroid of the Maryland county over which the photography was flown, as reported in GNIS. For additional information about the Survey's handling of collection-specific metadata, see the associated *NNGDPP Metadata Form* below

NNGDPP-compliant metadata for all 15,819 county-by-county photos flown during the period 1936-1990 were submitted to the *ScienceBase Catalog* this year, including 8,839 new records. In submitting 2012-2013 metadata to the *ScienceBase Catalog*, MGS requested an "erase and replace" substitution of the newer, complete version for the older, incomplete one, as opposed to appending new records to the original set.

PAPER-TO-DIGITAL CONVERSION

Several years ago, the Johns Hopkins University Eisenhower Library (JHU), a repository of Baltimore City and Baltimore County maps and aerial photography, approached MGS about scanning the Survey's 1930s and 1950s photos for those areas. Students, hired by the library, digitized the images at MGS, following standard specifications (1200 dpi, .tif and .jpg formats). JHU subsequently provided a copy of the .tif images to MGS.

More recently, MGS purchased a Plustek OpticPro A320 flatbed scanner to continue the digitizing begun by JHU, following the same specifications that JHU established for the Baltimore City and County air photos. As part of the 2012 NNGDPP grant, the Survey digitized the 5,711 aerial photos flown in the 1950s, exceeding the proposed 1,500-photograph minimum. Scanning of air photos continues.

ACCESSIBILITY

The 9"x9" aerial photographs held by MGS are available to visitors during normal business hours.

Digital images of Baltimore County and Baltimore City air photos (1930s and 1950s), previously scanned by Johns Hopkins University (JHU), are stored at the Survey, as are all copies of the 1950s photos scanned by MGS. MGS maintains a copy of the .jpg version of the JHU photography in the Digital Library, primarily for the benefit of MGS staff. Versions of the photography in both .tif and .jpg formats are stored on two portable hard drives, kept on MGS premises. Although MGS currently lacks the ability to support digital download of the imagery through its own website, prospective customers may request digital copies of the photographs through the MGS Publications Office.

JHU has posted the early Baltimore City and Baltimore County digital aerial photos to its free, publicly accessible *JScholarship* website (*Aerial Photography – Baltimore (1927, 1937, 1948, 1952, 1964, 1972)*, <https://jscholarship.library.jhu.edu/handle/1774.2/32749> [9/17/2012]). Files in .tif and .jpg formats are available for immediate download from that site.

SUMMARY OF ACTIONS

| Date | Action |
|-----------|--|
| ? | JHU scanned 1936-1938 and 1951-1953 air photos for Baltimore City and Baltimore County and posted digital images to <i>JScholarship</i> website |
| 2008 | MGS created the Microsoft Access database AirPhotoIndex.mdb and began populating it with records (air photos), based on their appearance on an index map, whether or not MGS possessed the photos |
| 8/30/2012 | Metadata (v. 1) for air photos flown during the earliest two eras, 1936-1938 and 1951-1953, submitted to NGGDPP for inclusion in the <i>ScienceBase Catalog</i> |
| 8/21/2013 | Metadata (v. 2) for all county-by-county, 9”x9” air photos flown during the period 1936-1990, submitted to NGGDPP for inclusion in the <i>ScienceBase Catalog</i> ; completed scanning all of the 1950s air photos |

NEXT STEPS

- As part of the 2013-2014 NGGDPP grant, MGS has already begun scanning the 1936-1938 aerial photos and intends to have completed digitizing them within a year.
- Once scanning is complete, photos will be transferred to archival boxes and removed to the Survey’s Archives Room, where temperature and humidity fluctuate within a narrower range.
- Once the digital imagery is accessible and easily searchable/downloadable, MGS intends to donate the original photographs and associated index maps to the Maryland State Archives (MSA) for permanent preservation. Visitors to the MGS website will be able to link to the available digital images.

MGS's Collection of Historical Aerial Photographs of Maryland, 1936-1938

| Table A2-1: Aerial photographs held by MGS, flown during the period 1936-1938, by county | | | | | | |
|---|------------|-------------|--------|--|--------------|----------------|
| Flight date(s) | Project ID | Flight line | Frames | | Index map ID | Archive box ID |
| | | | N | Frame nos. | | |
| Allegany County | | | | | | |
| 4/11/1938 - 5/2/1938 | AMN | 3 | 3 | 83, 85, 86 | | MGS-AP- |
| | | 4 | 2 | 48, 49 | | |
| | | 8 | 2 | 60,168 | | |
| | | Subtotal | 7 | | | |
| Anne Arundel County | | | | | | |
| 4/12/1938 - 5/1/1938 | AHR | 2 | 3 | 5, 59, 61 | 1 | MGS-AP- |
| | | 4 | 102 | 15-26, 28, 34-48, 60-63, 68-75, 78-85, 87-98, 103-131, 138-150 | 1, 3 | |
| | | 5 | 56 | 1, 3-14, 16, 24-27, 31-39, 41-55, 59-72 | 1-3 | |
| | | 6 | 89 | 1-18, 26-37, 40, 43-60, 62-73, 75-80, 82-103 | 2, 3 | |
| | | 8 | 8 | 41-48 | 2 | |
| | | Subtotal | 258 | | | |
| Baltimore County | | | | | | |
| 11/24/1937 - 5/2/1938 | AJO | 1 | 28 | 35-52, 54, 56, odd nos. from 123-131, even nos. from 136-140 | 5 | MGS-AP- |
| | | 2 | 10 | even nos. from 32-40; even nos. from 46-54 | 4 | |
| | | 3 | 18 | odd nos. from 27-39, even nos. from 42-48, 52, 54, odd nos. from 109-117 | 2, 4 | |

| Table A2-1: Aerial photographs held by MGS, flown during the period 1936-1938, by county | | | | | | | |
|---|-----|-----------------|---------------|---|---------|---------|--|
| | | | Frames | | | | |
| | | 8 | 25 | odd nos. from 27-37, 38-40, odd nos. from 49-57; even nos. from 110-120; even nos. from 138-146 | 4, 5 | | |
| | | 9 | 5 | odd nos. from 33-41 | 5 | | |
| | | 15 | 1 | 17 | 5 | | |
| | | 66 | 15 | 25-34, 47-51 | 1, 2 | | |
| | | 70 | 1 | 26 | 2 | | |
| | | Subtotal | 103 | | | | |
| Calvert County | | | | | | | |
| 4/12/1938 - 4/24/1938 | AHS | 4 | 6 | 132-137 | - | MGS-AP- | |
| | | 7 | 98 | 6-21, 26-46, 75-82, 84-94, 98-117, 151-172 | 1, 2, 4 | | |
| | | 10 | 41 | 1-11, 45-50, 52-65, 97-106 | 2 | | |
| | | Subtotal | 145 | | | | |
| Carroll County | | | | | | | |
| 9/24/1937 – 3/22/1938 | AGZ | 19 | 7 | even nos. from 30-38, 87, 94 | 1 | MGS-AP- | |
| | | 20 | 3 | 66, 68, 69 | 1 | | |
| | | 49 | 8 | 70, 72-75, 77, 89, 91 | 1, 2 | | |
| | | 53 | 13 | even nos. from 24-32, 40-47 | 1, 2 | | |
| | | 66 | 20 | 52-56, 59-66, 68-74 | 3 | | |
| | | 71 | 23 | 1-8, 19-27, odd nos. from 29-33, 37, 42, 46 | 1-3 | | |
| | | 78 | 17 | 1-9, 11-17, 27 | 1, 3 | | |
| | | 79 | 3 | even nos. from 74-78 | 4 | | |
| | | 81 | 35 | 2, even nos. from 14-20, 21-29, 34-35, 37-41, odd nos. from 43-49, 50, 56, | 1, 2, 4 | | |

| Table A2-1: Aerial photographs held by MGS, flown during the period 1936-1938, by county | | | | | | |
|---|-----|---------------|-----|---|------|---------|
| | | Frames | | | | |
| | | | | even nos. from 60-64, 74, 76, odd nos. from 85-89 | | |
| | | 83 | 7 | even nos. from 10-22 | 4 | |
| | | Subtotal | 136 | | | |
| Cecil County | | | | | | |
| 4/15/1938 – 4/25/1938 | ANI | 12 | 3 | 161-163 | 3 | MGS-AP- |
| | | Subtotal | 3 | | | |
| Charles County | | | | | | |
| 4/22/1937 – 9/8/1937 | AHU | 1 | 37 | 1-17, 33-36, 52-58, 61, 76-79, 94-97 | 1, 3 | MGS-AP- |
| | | 2 | 4 | 119-122 | 1, 3 | |
| | | 4 | 6 | odd nos. from 5-13, 28 | 2, 4 | |
| | | 21 | 5 | 58, 59, 61, 87, 89 | 3 | |
| | | 30 | 1 | 12 | 2 | |
| | | 32 | 3 | 3, 5, 7 | 2 | |
| | | Subtotal | 56 | | | |
| Dorchester County | | | | | | |
| 5/1/1938 – 5/7/1938 | ANJ | 13 | 1 | 47 | 1 | MGS-AP- |
| | | 19 | 5 | 18-22 | 5 | |
| | | Subtotal | 6 | | | |
| Frederick County | | | | | | |
| 9/24/1937 – 4/12/1938 | AHA | 19 | 14 | 40, 45-57 | 2, 4 | MGS-AP- |
| | | 20 | 12 | 78-89 | 4 | |
| | | 49 | 9 | 78-95, 87 | 2, 4 | |
| | | 53 | 6 | 34-39 | 2, 4 | |

| Table A2-1: Aerial photographs held by MGS, flown during the period 1936-1938, by county | | | | | | | |
|---|-----|----------|---------------|---|--|---------|---------|
| | | | Frames | | | | |
| | | 70 | 3 | 1, 3, 5 | | 3 | |
| | | 86 | 15 | 73, 79-92 | | 2, 4 | |
| | | Subtotal | 59 | | | | |
| Garrett County | | | | | | | |
| 5/2/1938 – 10/25/1938 | AMO | 8 | 8 | even nos. from 170-184 | | 2 | MGS-AP- |
| | | 9 | 18 | even nos. from 86-98, odd nos. from 121-129, 156, 160, odd nos. from 167-173 | | 2 | |
| | | 10 | 23 | 5, 10, odd nos. from 29-33, odd nos. from 69-73, odd nos. from 107-131, 138, 140 | | 1-4 | |
| | | 11 | 13 | 24, 26, 30, 32, odd nos. from 39-45, 46, 48, even nos. from 58-62 | | 1, 3 | |
| | | 12 | 64 | odd nos. from 1-25, 26, odd nos. from 27-31, 37, odd nos. from 41-61, even nos. from 64-76, odd nos. from 83-91, even nos. from 96-104, odd nos. from 111-145 | | 1-4 | |
| | | 15 | 13 | odd nos. from 97-121 | | 1, 3 | |
| | | 16 | 12 | even nos. from 2-16, even nos. from 20-26 | | 1, 2, 4 | |
| | | 18 | 16 | odd nos. from 113-119, even nos. from 128-150 | | 1, 3 | |
| | | Subtotal | 167 | | | | |
| Harford County | | | | | | | |
| 4/5/1938- | ANK | 1 | 7 | 22, 67, 114-117, 144 | | 1, 3 | MGS-AP- |

| Table A2-1: Aerial photographs held by MGS, flown during the period 1936-1938, by county | | | | | | | |
|---|-----|---------------|-----|---|------|---------|--|
| 4/23/1938 | | Frames | | | | | |
| | | 9 | 2 | 17, 47 | 1 | | |
| | | Subtotal | 9 | | | | |
| Howard County | | | | | | | |
| 12/3/1937 | NP | 72 | 5 | 18-22 | 1 | MGS-AP- | |
| | | Subtotal | 5 | | | | |
| Montgomery County | | | | | | | |
| 12/11/1937- 4/11/1938 | NV | 1 | 42 | 1-8, 11-16, 19-24, 27-32, 35-40, 44-49, 51-54 | 3 | MGS-AP- | |
| | | 74 | 4 | 49-52 | 4 | | |
| | | 79 | 6 | 32-35, 68, 69 | 4 | | |
| | | Subtotal | 52 | | | | |
| Prince George's County | | | | | | | |
| 6/23/1937- 5/1/1938 | AHV | 1 | 32 | 57-59, 63-90, 92 | 3, 4 | | |
| | | 2 | 31 | odd nos. from 7-33, even nos. from 34-52, 53, even nos. from 54-58, odd nos. from 67-71 | 3, 4 | | |
| | | 3 | 32 | odd nos. from 1-21, 73, 74, 82-86, 90-94, 98, 100, even nos. from 106-118 | 2-4 | | |
| | | 4 | 17 | odd nos. from 1-13, 37, 39, even nos. from 50-58, 59, 76, 77 | 3, 4 | | |
| | | 30 | 2 | 14, 16 | 4 | | |
| | | 32 | 3 | 9, 11, 13 | 4 | | |
| 4/19/1937- 5/31/1938 | FG | 113 | 26 | 46-71 | - | | |
| | | 118 | 116 | 14-23, 26, 28-30, 32, 37-40, 42-44, 49-58, 76-78, 80-97, 102, 103, 106- | - | | |

| Table A2-1: Aerial photographs held by MGS, flown during the period 1936-1938, by county | | | | | | | |
|---|-----|-----------------|---------------|--|--|------|--|
| | | | Frames | | | | |
| | | | | 147, 149, 150, 156-164, 168-171, 173-176 | | | |
| | | 119 | 23 | 1-22, 79 | | 2 | |
| | | 132 | 44 | even nos. from 68-72, 150-190 | | 1 | |
| | | 133 | 13 | even nos. from 150-156, even nos. from 162-166, odd nos. from 179-183, 286, 188, 189 | | - | |
| | | 135 | 22 | 1-22 | | 3, 4 | |
| | | Subtotal | 361 | | | | |
| Queen Anne's County | | | | | | | |
| 6/24/1937- 9/10/1937 | AHW | 5 | 1 | 17 | | 4 | |
| | | 6 | 3 | 90-92 | | 4 | |
| | | 7 | 1 | 37 | | 4 | |
| | | 28 | 1 | 43 | | 4 | |
| | | 37 | 1 | 14 | | 2 | |
| | | Subtotal | 7 | | | | |
| Somerset County | | | | | | | |
| 5/3/1938- 5/7/1938 | ANL | 16 | 1 | 118 | | 3 | |
| | | 18 | 1 | 190 | | 3 | |
| | | 20 | 1 | 131 | | - | |
| | | Subtotal | 3 | | | | |
| St. Mary's County | | | | | | | |
| 4/20/1938- 4/24/1938 | AHX | 7 | 2 | 46, 118 | | - | |
| | | 10 | 5 | 122-126 | | 4 | |
| | | Subtotal | 7 | | | | |

| Table A2-1: Aerial photographs held by MGS, flown during the period 1936-1938, by county | | | | | | | |
|---|-----|----------|---------------|------------------|------|--|--|
| | | | Frames | | | | |
| Talbot County | | | | | | | |
| 8/20/1936- 11/14/1937 | AHY | 5 | 9 | 29-37 | 1 | | |
| | | 6 | 7 | 30, 31, 40-44 | 1, 3 | | |
| | | 27 | 8 | 87-94 | 3 | | |
| | | 28 | 11 | 20-29, 84 | 3 | | |
| | | 36 | 5 | 46-50 | 3 | | |
| | | 63 | 2 | 58, 59 | 3 | | |
| | | Subtotal | 42 | | | | |
| Wicomico County | | | | | | | |
| 5/3/1938- 6/7/1938 | ANM | 16 | 5 | 129-133 | 1 | | |
| | | 18 | 4 | 80, 87, 89, 188 | 1 | | |
| | | 19 | 8 | 128-131, 165-168 | 2 | | |
| | | 20 | 11 | 42-45, 132-138 | 2 | | |
| | | 26 | 2 | 170, 171 | 2 | | |
| | | Subtotal | 30 | | | | |
| | | TOTAL | 1,455 | | | | |

MGS's Collection of Historical Aerial Photographs of Maryland, 1951-1953 and/or 1957-1958

| Table A2-2: Aerial photographs held by MGS, flown during the periods 1951-1953 and/or 1957-1958, by county | | | | | | |
|---|------------|-------------|--------------|---|--------------|----------------|
| Flight date(s) | Project ID | Flight line | Frames | | Index map ID | Archive box ID |
| | | | N (scan) | Frame nos. | | |
| Allegany County | | | | | | |
| | | Subtotal | 0 | | | |
| Anne Arundel County | | | | | | |
| 6/20/1952 - 10/17/1952 | AHR | 1K | 141 (138) | 2, 4-38, 44-50, 52-66, 68-75, 79, 82, 83, 85-105, 107, 108, 110, 111, 113-118, 122-127, 131, 133-155, 190-192, 204-210, 212 | 1-3 | MGS-AP- |
| | | 2K | 8 (8) | odd nos. from 5-15, 16, 17 | 1 | |
| | | 4K | 44 (44) | 2-16, 145-157, 167-179, 191-193 | 3 | |
| | | 6K | 17 (17) | 6-9, 19-31 | 2 | |
| | | 7K | 54 (54) | even nos. from 86-90, even nos. from 96-100, 101, 102, 104, 144-156, 158, 160-165, 171-187, 189-191, 198-202 | 1-3 | |
| | | Subtotal | 264 (261) | | | |
| Baltimore County | | | | | | |
| 7/12/1952-2/14/1953 | AJO | 3K | 6 (6) | 192-197 | 4 | MGS-AP- |

| Table A2-2: Aerial photographs held by MGS, flown during the periods 1951-1953 and/or 1957-1958, by county | | | | | |
|---|-----|---------------|--|---------------------------------|---|
| | | Frames | | | |
| | | 4K | 52 (52) | 2, 3, 5-13, 59-76, 98-120 | |
| | 5K | 105 (104) | 40-61, 70-80, 83-91, 119-122, 128, 129, 133-143, 149-159, 162-164, 176-183, 187-193, 199, 201, 203, 204, 206, 207, 210-220 | 2-4 | |
| | 6K | 153 (153) | 6-15, 17-23, 25-38, 42-53, 55-63, 80-117, 133-180, 205-219 | 1, 3 | |
| | 7K | 62 (62) | 13-28, 52-74, 87, 90-103, 131-138 | 1, 3 | |
| | 8K | 61 (63) | 70, 71, 73-78, 81, 86-95, 97, 99, even nos. from 102-106, 107-111, 113-117, 121-129, 131-135, 137, 138, 143-153 | 3, 4 | |
| 4/24/1953- 5/10/1953 | 431 | 2 | 10 (12) | even nos. from 618-622, 623-629 | - |
| | | 3 | 16 (16) | 600-615 | - |
| | | 4 | 22 (22) | 630-635, 637-652 | - |
| | | 5 | 23 (23) | 576-598 | - |
| | | 6 | 21 (21) | 552-572 | - |
| | | 7 | 24 (24) | 300-310, 312, 314, 315-325 | - |
| | | 8N | 10 | 526-535 | - |
| | | 8S | 9 | 543-551 | - |
| | | 9 | 20 | 253-267, 274-276, 278, 279 | - |

Table A2-2: Aerial photographs held by MGS, flown during the periods 1951-1953 and/or 1957-1958, by county

| | | Frames | | |
|----------|------------|---------------------------|---|--|
| | | (20) | | |
| 10 | 14 (14) | 500-504, 513, 516-523 | - | |
| 11 | 16 (16) | 207-215, 217-220, 227-229 | - | |
| 12 | 13 (13) | 464-476 | - | |
| 13 | 8 (8) | 183-190 | - | |
| 14 | 8 (8) | 452-459 | - | |
| 15 | 16 (16) | 151-165, 167 | - | |
| 16 | 19 (19) | 130-148 | - | |
| 17 | 20 (20) | 109-128 | - | |
| 18 | 21 (21) | 86-106 | - | |
| 19 | 21 (21) | 61, 63-70, 431-442 | - | |
| 20 | 13 (15) | 47-55, 57-60 | - | |
| 21 | 10 (10) | 22, 23, 25-29, 31-33 | - | |
| 22 | 6 (6) | 11, 13-16, 21 | - | |
| Subtotal | | 774 | | |

| Table A2-2: Aerial photographs held by MGS, flown during the periods 1951-1953 and/or 1957-1958, by county | | | | | | |
|---|-----|----------|---------------|---|------|---------|
| | | | Frames | | | |
| | | | (816) | | | |
| 9/25/1957 | AJO | 5T | 26 | 45-55, 117-126, 136-140 | 3, 4 | MGS-AP- |
| | | 6T | 4 | 1-4 | 4 | |
| | | 7T | 2 | 52, 53 | 4 | |
| | | Subtotal | 32 | | | |
| Calvert County | | | | | | |
| 6/26/1952 - 10/22/1952 | AHS | 3K | 35 | 146-159, 161-181 | 1 | MGS-AP- |
| | | 4K | 69 | 25-32, 34-48, 50-69, 71, 72, 122-145 | 1 | |
| | | 5K | 45 | 47-53, 94-96, 98-100, 105-114, 156-177 | 1 | |
| | | 6K | 5 | 127, 129, 130-132 | 1 | |
| | | Subtotal | 154 | | | |
| 10/13/1957- 10/22/1957 | | 5T | 5 | 134, 175, 181, 188, 190 | ? | MGS-AP- |
| | | 6T | 5 | (even nos. from 34-42) | ? | |
| | | Subtotal | 10 | | | |
| Caroline County | | | | | | |
| 6/6/1952 – 10/4/1952 | AHT | 1K | 10 | 24-29, 176-179 | 2 | MGS-AP- |
| | | 2K | 85 (86) | 1-25, 62-84, 86-94, 100-127 | 1, 2 | |
| | | 3K | 41 | 50-79, 84-94 | 1, 2 | |
| | | 4K | 18 | 1-10, 199-206 | 1, 2 | |
| | | 7K | 67 (69) | 6-14, 18-20, 54-62, 66-78, 80-86, 92-95, 133-135, 137-155 | 1, 2 | |
| | | Subtotal | 221 | | | |
| Carroll County | | | | | | |

| Table A2-2: Aerial photographs held by MGS, flown during the periods 1951-1953 and/or 1957-1958, by county | | | | | | |
|---|-----|----------|---------------|--|---|---------|
| | | | Frames | | | |
| 10/24/1951 – 9/14/1952 | AGZ | 1K | 21 | 1-11, 13-22 | - | MGS-AP- |
| | | 5K | 64 | 64-66, 113-138, 179-213 | - | |
| | | 6K | 87 | 36-55, 115-168, 209-221 | - | |
| | | 7K | 74 | 2-18, 31-59, 100-127 | - | |
| | | 9K | 19 | 1-19 | - | |
| | | Subtotal | 265 (246) | | | |
| Cecil County | | | | | | |
| 7/2/1952 – 7/12/1952 | ANI | 1K | 39 | 3, 5-12, 14-27, 31-46 | 1 | MGS-AP- |
| | | 2K | 156 (169) | 5-16, 20-36, 38-41, 49, 53-67, 69-71, 78, 79, 83-104, 110-131, 135, 138, 139, 143-163, 169-182, 187, 188, 190- 193, 206-219 | 1 | |
| | | 3K | 25 | 16-25, 30-37, 80-84, 90, 91 | 1 | |
| | | Subtotal | 220 (233) | | | |
| 8/13/1957- 10/3/1957 | ANI | 1T | 35 | even nos. 4-26, even no. 36-52, even nos. 56-58; odd nos. 65-87 | ? | MGS-AP- |
| | | 2T | 59 | odd nos. 5-29, even nos. 36-60, odd nos. 67-91, even nos. 98-120, odd nos. 153-157, odd nos. 189-197 | ? | |
| | | 3T | 14 | even nos. 6-16, odd nos. 45-51, 61, 65, 68, 114 | ? | |
| | | 7T | 7 | odd nos. 129-141 | ? | |
| | | Subtotal | 115 | | | |
| Charles County | | | | | | |

| Table A2-2: Aerial photographs held by MGS, flown during the periods 1951-1953 and/or 1957-1958, by county | | | | | | | |
|---|----------|--------------|---------------|---|--|---------|-----|
| | | | Frames | | | | |
| 6/19/1952 – 10/22/1952 | AHU | 1K | 180 | 4-26, 31-46, 49-55, 57-60, 64-78, 83-95, 102, 103, 107-118, 120-146, 148-160, 162-184, 190-202, 205-216 | 1, 3 | MGS-AP- | |
| | | 2K | 126 (128) | 1-29, 36-67, 69-93, 116-140, 148-150, 152, 153, 159-168 | 1-4 | | |
| | | 3K | 26 (27) | 5-10, 12-16, 67-76, 141-145 | 2 | | |
| | | 6K | 75 | 3-24, 26-52, 59-75, 89-97 | 2, 4 | | |
| | | Subtotal | 407 (410) | | | | |
| Dorchester County | | | | | | | |
| 6/6/1952 – 10/4/1952 | ANJ | 1K | 116 | 2-7, 9-23, 35-66, 70-77, 79-86, 88-95, 106-138, 170-175 | 1-4 | MGS-AP- | |
| | | 2K | 19 | 38-42, 48-61 | 2 | | |
| | | 3K | 31 | 18-43, 45-49 | 2, 4 | | |
| | | 4K | 41 | 34-38, 40-43, 45-60, 143-158 | 2, 4 | | |
| | or | AHT (NJ)* | 5K | 158 | 1-12, 14-35, 42-46, 48-65, 68, 80-83, 100-108, 110-115, 117-129, 131-152, 154, 155, 157, 162-189, 198-208, 210-213 | | 1-4 |
| | 6K | | 7 | 16-22 | 1, 3 | | |
| | 7K* | | 75 | 1, 3-5, 6*, 20*, 21-35, 37-53, 96-132 | 2, 4 | | |
| | Subtotal | | 447 | | | | |
| Frederick County | | | | | | | |
| 9/11/1952 – 10/24/1952 | AHA | 3K | 23 | 132-142, 146-157 | 3 | MGS-AP- | |
| | or | 4K* | 159 | 3-30, 31*, 85-149, 151-161, 164-177, | 1-4 | | |

| Table A2-2: Aerial photographs held by MGS, flown during the periods 1951-1953 and/or 1957-1958, by county | | | | | | | |
|---|--------------|----------|---------------|---|---|---------|--|
| | AHB (HA)* | | Frames | | | | |
| | | | | 179-218 | | | |
| | | 5K | 93 | 1-3, 5-13, 15, 16, 18, 21-34, 36, 38, 39-54, 56-59, 61-63, 67-89, 106-112, 139-144, 176-178 | | 2, 4 | |
| | | 8K | 67 | 73-79, 106-130, 134-168 | | 1, 3 | |
| | | Subtotal | 342 | | | | |
| Garrett County | | | | | | | |
| | | Subtotal | 0 | | | | |
| Harford County | | | | | | | |
| 7/2/1952- 10/22/1952 | ANK | 2K | 3 (4) | 199, 201, 202 | 1 | MGS-AP- | |
| | | 3K | 141 | 4-15, 38-53, 59-79, 92-116, 120-151, 156-172, 174-185, 198-203 | 1 | | |
| | | 4K | 44 | 14-36, 52-58, 121-130, 133-136 | 1 | | |
| | | 5K | 56 (57) | 2, 3, 5-20, 25-39, 92-104, 109-118 | 1 | | |
| | | 7K | 11 (12) | 116-118, 120-127 | 1 | | |
| | | Subtotal | 255 (259) | | | | |
| 8/28/1957 | | 3T | 1 | 112 | ? | MGS-AP- | |
| | | Subtotal | 1 | | | | |
| Howard County | | | | | | | |
| 10/24/1951- 9/14/1952 | NP | 6K | 18 | 169-177, 200-208 | - | MGS-AP- | |
| | | 7K | 17 | 60-67, 91-99 | - | | |

| Table A2-2: Aerial photographs held by MGS, flown during the periods 1951-1953 and/or 1957-1958, by county | | | | | | |
|---|-----|---------------|------------|---------------------------------------|---------|---------|
| | | Frames | | | | |
| | | 9K | 2 | 79, 80 | - | |
| | | Subtotal | 37 | | | |
| Kent County | | | | | | |
| 6/3/1952- 6/6/1952 | FB | 1K | 19 (20) | 3-21 | 1 | MGS-AP- |
| | | 2K | 81 | 3-45, 117-136, 139-156 | 1 | |
| | | 3K | 56 | 33-39, 41-45, 48-59, 154-174, 203-213 | 1 | |
| | | 4K | 19 | 11-29 | 1 | |
| | | 5K | 30 | 25-33, 138-158 | 1 | |
| | | Subtotal | 205 | | | |
| 8/6/1957- 11/6/1957 | | 1T | 2 | 184, 186 | ? | MGS-AP- |
| | | 4T | 1 | 84 | ? | |
| | | 5T | 2 | 93, 202 | ? | |
| | | Subtotal | 5 | | | |
| Montgomery County | | | | | | |
| 9/20/1951- 9/28/1951 | NV | 1G | 31 | 11-28, 30-42 | - | MGS-AP- |
| | | 2G | 26 | 51-62, 67-80 | | |
| | | Subtotal | 57 | | | |
| Prince George's County | | | | | | |
| 6/20/1952- 10/17/1952 | AHV | 1K | 29 | 172-190, 194-203 | 1, 2, 4 | MGS-AP- |
| | | 2K | 1 | 19 | 1 | |
| | | 3K | 20 | 1-20 | 2, 4 | |
| | | 5K | 4 | 4, 6, 8, 9 | 1 | |
| | | 7K | 4 | 84, 85, 105, 106 | 1 | |

| Table A2-2: Aerial photographs held by MGS, flown during the periods 1951-1953 and/or 1957-1958, by county | | | | | | |
|---|-----|----------|---------------|--|------|---------|
| | | | Frames | | | |
| | | Subtotal | 58 | | | |
| Queen Anne's County | | | | | | |
| 6/3/1952- 6/6/1952 | AHW | 1K | 20 | 22-34, 62, 63, 66-70 | 2 | MGS-AP- |
| | | 2K | 44 | 1, 2, 46-58, 60, 61, 102, 103, 105-116, 157-169 | 1-3 | |
| | | 3K | 88 | 14-32, 60-77, 79, 80, 133-153, 175-202 | 1, 3 | |
| | | 4K | 32 | 1-11, 30-50 | 1, 3 | |
| | | 5K | 72 | 15-24, 35-46, 76-95, 97, 119-137, 159-168 | 1-3 | |
| | | Subtotal | 256 | | | |
| 8/6/1957- 11/6/1957 | AHW | 1T | 22 | even nos. 28-34, 38, odd nos. 71-79, even nos. 98-104, odd nos. 137-141, even nos. 188-196 | ? | MGS-AP- |
| | | 2T | 22 | odd nos. 29-33, odd nos. 77-85, even nos. 130-136, even nos. 174-192 | ? | |
| | | 3T | 26 | even nos. 80-100, even nos. 142-162, even nos. 184-190 | ? | |
| | | 4T | 32 | odd nos. 11-25, odd nos. 57-65, even nos. 76-82, even nos. 108-114, even nos. 154-174 | ? | |
| | | 5T | 22 | odd nos. 79-87, odd nos. 95-109, even nos. 136-144, even nos. 180-186 | ? | |
| | | Subtotal | 124 | | | |
| Somerset County | | | | | | |
| 6/1952- | ANL | 3K | 82 | 46-55, 100-104, 116-139, 172-175, | 1 | |

| Table A2-2: Aerial photographs held by MGS, flown during the periods 1951-1953 and/or 1957-1958, by county | | | | | | |
|---|-----------------|---------------|----|--|---|---------|
| | | Frames | | | | |
| 10/4/1952 | | | | 177-194, 197-217 | | |
| | | 4K | 89 | 2, 3, 46, 48-90, 128-130, 132-150, 154-174 | 1 | |
| | | 4L | 2 | 47, 131 | | |
| | | 5K | 91 | 2-16, 22-37, 43-61, 64-82, 99-120 | 1 | |
| | | 6K | 8 | 85, 86, 88-93 | 1 | |
| | Subtotal | 272 | | | | |
| St. Mary's County | | | | | | |
| 6/19/1952- 10/22/1952 | AHX | 2K | 7 | 145-147, 155-158 | 1 | MGS-AP- |
| | | 3K | 92 | 17-34, 45-66, 98, 99, 101-109, 120-140, 182-201 | 1 | |
| | | 4K | 39 | 8, 9, 11-24, 73-75, 88, 103-121 | 1 | |
| | | 5K | 73 | 17-30, 54-71, 75-81, 115-131, 138-144, 197-204, 206, 207 | 1 | |
| | | 6K | 48 | 76-88, 101-126, 133-141 | 1 | |
| | | 8K | 1 | 100 | | |
| | Subtotal | 260 | | | | |
| 10/13/1957 | | 3T | 4 | 2, 4, 22, 24 | ? | MGS-AP- |
| | | 5T | 1 | 98 | ? | |
| | Subtotal | 5 | | | | |
| Talbot County | | | | | | |
| 6/3/1952- 6/6/1952 | AHY | 1K | 27 | 35-61 | 1 | MGS-AP- |
| | | 2K | 79 | 62-74, 76-78, 81-101, 170-194, 197-213 | 1 | |
| | | 3K | 57 | 5-13, 81-105, 109-131 | 1 | |
| | | 4K | 11 | 51-61 | 1 | |

| Table A2-2: Aerial photographs held by MGS, flown during the periods 1951-1953 and/or 1957-1958, by county | | | | | | |
|---|-----|----------|---------------|---|------|---------|
| | | | Frames | | | |
| | | 5K | 47 | 1-14, 48-59, 63-73, 100-109 | 1 | |
| | | Subtotal | 221 | | | |
| 8/6/1957- 10/23/1957 | | 1T | 27 | even nos. 44-50, odd nos. 59-65, odd nos. 107-117, odd nos. 123-131, 197, 198, odd nos. 199-209 | ? | MGS-AP- |
| | | 2T | 35 | even nos. 82-102, odd nos. 109-129, odd nos. 193-217 | ? | |
| | | 3T | 16 | odd nos. 101-121, odd nos. 133-141 | ? | |
| | | 4T | 12 | odd nos. 131-153 | ? | |
| | | 5T | 11 | odd nos. 121-123, even nos. 146-162 | ? | |
| | | Subtotal | 101 | | | |
| Washington County | | | | | | |
| 9/11/1952- 10/24/1952 | AHB | 2K | 85 | 100-113, 130-143, 146-167, 169-181, 185-190, 204-219 | 2-4 | |
| | | 3K | 91 | 1-8, 18-50, 52-69, 83-92, 110-131 | 3, 4 | |
| | | 4K | 8 | 32-39 | 3 | |
| | | 8K | 76 | 24-37, 39-72, 80-85, 87-105, 169-171 | 2, 3 | |
| | | Subtotal | 260 | | | |
| Wicomico County | | | | | | |
| 6/8/1952- 10/4/1952 | ANM | 2K | 10 | 23-26, 32, 33, 81, 82, 152, 179 | 1 | |
| | | 3K | 5 | 15, 60, 140, 170, 171 | 1 | |
| | | 4K | 11 | 4, 5, 44, 45, 91-93, 127, 175-177 | 1 | |
| | | 5K | 1 | 98 | 1 | |
| | | 6K | 1 | 94 | 1 | |
| | | Subtotal | 28 | | | |

| Table A2-2: Aerial photographs held by MGS, flown during the periods 1951-1953 and/or 1957-1958, by county | | | | | | |
|---|-----|---------------|-------|---|------|--|
| | | Frames | | | | |
| Worcester County | | | | | | |
| 6/8/1952- 10/22/1952 | ANN | 1K | 113 | 3, 10, 15-17, 19-27, 32-50, 56-70, 100-103, 105-114, 120-137, 172-186, 195-199, 201-213 | 1, 3 | |
| | | 2K | 110 | 5-17, 34-54, 61, 64-80, 109-119, 121- 126, 128, 132-151, 180-199 | 1-4 | |
| | | 3K | 37 | 16-35, 40-45, 56-59, 105-111 | 2, 4 | |
| | | 6K | 59 | 3-14, 35-67, 124-137 | 1 | |
| | | Subtotal | 319 | | | |
| TOTAL (All counties) | | | 5,711 | | | |

MGS's Collection of Historical Aerial Photographs of Maryland, 1961-1968

| Table A2-3: Aerial photographs (9"x9") held by MGS, flown during the period 1961-1968, by county | | | | | | |
|---|------------|-------------|--------|--|--------------|----------------|
| Flight date(s) | Project ID | Flight line | Frames | | Index map ID | Archive box ID |
| | | | N | Frame nos. | | |
| Allegany County | | | | | | |
| 10/18/1961 - 10/1/1962 | AMN | 1AA | 142 | 5-8, 14-16, 18-21, 29-38, 45-58, 63-77, 84-99, 104-118, 124-139, 143-157, 163-169, 171-178, 182-195 (plus 1 missing frame no.) | ? | MGS-AP- |
| | | 2AA | 101 | 4-15, 17-29, 34-40, 43-45, 50-64, 79-86, 91-98, 100-102, 122-134, 137-146, 175-181 (duplicates of 126, 127) | ? | |
| | | 4AA | 13 | 125, 128-130, 135-143 | ? | |
| | | Subtotal | 256 | | | |
| Anne Arundel County | | | | | | |
| 10/13/1963 - 10/14/1963 | AHR | 1DD | 38 | 2-6, 8-20, 27-29, 33-39, 41-45, 47-51 | 1, 3 | MGS-AP- |
| | | 2DD | 190 | 1-28, 37-71, 74-110, 113-122, 131-149, 160-167, 177-209, 245-247, 259-275 | 1, 2, 3 | |
| | | 3DD | 26 | 1-13, 94-102, 105-108 | 2 | |
| | | Subtotal | 254 | | | |
| Baltimore County | | | | | | |
| 5/16/1964 - 6/25/1964 | AJO | 1DD | 70 | 57-64, 70-73, 144, 146-157, 174-194, 202-225 | 1, 3, 4 | MGS-AP- |
| | | 2DD | 213 | 4-15, 17-24, 27-39, 44-65, 68-83, 88-99, 102-121, 130-160, 169-178, 180- | 2, 3 | |

| Table A2-3: Aerial photographs (9"x9") held by MGS, flown during the period 1961-1968, by county | | | | | | | |
|---|------|----------|---------------|--|------|---------|--|
| | | | Frames | | | | |
| | | | | 188, 195-206, 212-215, 221-248, 258-264, 267-275 | | | |
| | | 3DD | 5 | 226-230 | 4 | | |
| | | 4DD | 31 | 26-37, 43-61 | 4 | | |
| | | 5DD | 48 | 66-81, 136-160, 182-185, 187-188, 220 | 1, 4 | | |
| | | Subtotal | 367 | | | | |
| 2/5/1968 - 3/25/1968 | 1165 | 1 | 11 | 21-31 | ? | | |
| | | 1A | 4 | 10-13 | ? | | |
| | | 2 | 17 | 20-36 | ? | | |
| | | 3 | 17 | 20-36 | ? | | |
| | | 4 | 12 | 23-33, 36 | ? | | |
| | | 5 | 15 | 17, 22-35 | ? | | |
| | | 6 | 14 | 25-38 | ? | | |
| | | 7 | 19 | 19-37 | ? | | |
| | | 8 | 11 | 18-28 | ? | | |
| | | 9 | 3 | 23-25 | ? | | |
| | | Subtotal | 123 | | | | |
| | | Subtotal | 490 | | | | |
| Calvert County | | | | | | | |
| 10/15/1963 - 6/21/1964 | AHS | 1DD | 43 | 107-117, 121-127, 163-175, 180, 188-189, 191-199 | 1, 2 | MGS-AP- | |
| | | 2DD | 65 | 58-80, 122-140, 142, 150-161, 195-204 | 1, 2 | | |
| | | 3DD | 34 | 4-12, 62-72, 80-93 | 1, 2 | | |
| | | 5DD | 6 | 2-7 | 2 | | |
| | | Subtotal | 148 | | | | |

| Table A2-3: Aerial photographs (9"x9") held by MGS, flown during the period 1961-1968, by county | | | | | | |
|---|-----|---------------|-----|---|------------|---------|
| | | Frames | | | | |
| Caroline County | | | | | | |
| 5/6/1964 - 5/22/1964 | AHT | 1EE | 1 | 36 | 3 | MGS-AP- |
| | | 2EE | 2 | 33, 65 | 3 | |
| | | 3EE | 1 | 46 | 3 | |
| | | 5EE | 3 | 24-25, 209 | 2, 3 | |
| | | Subtotal | 7 | | | |
| Carroll County | | | | | | |
| 9/23/1963 – 10/15/1963 | AGZ | 2DD | 40 | 7-8, 63, 78-85, 105-112, 115-120, 133-136, 164-174 | 2, 3 | MGS-AP- |
| | | 3DD | 12 | 24-35 | 2, 3 | |
| | | Subtotal | 52 | | | |
| Cecil County | | | | | | |
| 5/21/1964 | ANI | 3DD | 13 | 10-18, 45-48 | 1, 3 | MGS-AP- |
| | | Subtotal | 13 | | | |
| Charles County | | | | | | |
| 5/4/1964 – 6/10/1964 | AHU | 1DD | 98 | 3-7, 9-15, 22-36, 40-58, 63-79, 83-94, 96-103, 271-285 | 1, 2, 3, 4 | MGS-AP- |
| | | 2DD | 22 | 33-54 | 2, 3 | |
| | | 3DD | 134 | 17-19, 99-120, 166-194, 200-228, 232-257, 264-288 | 1, 2, 3, 4 | |
| | | 4DD | 31 | 57-63, 67-75, 114-127, 130 | 1, 2, 3 | |
| | | Subtotal | 285 | | | |
| Dorchester County | | | | | | |

| Table A2-3: Aerial photographs (9"x9") held by MGS, flown during the period 1961-1968, by county | | | | | | |
|---|-----|----------|---------------|---|------------|---------|
| | | | Frames | | | |
| 5/6/1964 – 5/22/1964 | ANJ | 1EE | 12 | 37-48 | 2 | MGS-AP- |
| | | 2EE | 15 | 34-47, 64 | 1, 2 | |
| | | 3EE | 51 | 47-70, 76-102 | 2, 5 | |
| | | 4EE | 157 | 5-13, 15-30, 32-54, 62-84, 89-110, 114-133, 136-155, 157-177, 188-190 | 1, 3, 4 | |
| | | 5EE | 138 | 26-49, 59-90, 125-147, 149-153, 160- 183, 210-231, 239-246 | 2, 5 | |
| | | Subtotal | 373 | | | |
| Frederick County | | | | | | |
| 5/22/1964 – 6/30/1964 | AHA | 1EE | 43 | 4-11, 16-31, 36-54 | 1, 4 | MGS-AP- |
| | | 2EE | 178 | 2-31, 38-43, 48, 52-68, 78-95, 104- 110, 113-121, 125-146, 149-168, 170, 172-182, 186-221 | 1, 2, 3, 4 | |
| | | 3EE | 178 | 3-25, 34-36, 38-49, 52-87, 91-99, 101- 123, 127-153, 155-178, 182-195, 198- 204 | 2, 3 | |
| | | Subtotal | 399 | | | |
| Garrett County | | | | | | |
| 9/12/1962 – 10/1/1962 | AMO | 2AA | 49 | 108, 112-115, 162-174, 184-204, 252- 257, 264-267 | ? | MGS-AP- |
| | | 3AA | 232 | 6-12, 34-61, 67-93, 98-115, 117-128, 133-163, 168-200, 204-240, 244-281 (duplicates of 158) | ? | |
| | | 4AA | 92 | 1-20, 22-36, 41-62, 67-101 | ? | |
| | | Subtotal | 373 | | | |

| Table A2-3: Aerial photographs (9"x9") held by MGS, flown during the period 1961-1968, by county | | | | | | |
|---|-----|----------|---------------|--|------------|---------|
| | | | Frames | | | |
| Harford County | | | | | | |
| 5/18/1964 - 6/25/1964 | ANK | 1DD | 2 | 173, 226 | 3 | MGS-AP- |
| | | 4DD | 3 | 24-25, 62 | 3 | |
| | | 5DD | 11 | 209-219 | 2 | |
| | | Subtotal | 16 | | | |
| Howard County | | | | | | |
| 10/11/1963 | NP | 3DD | 4 | 49, 105, 120, 125 | 1 | MGS-AP- |
| | | Subtotal | 4 | | | |
| Kent County | | | | | | |
| 4/17/1964 - 5/2/1964 | FB | 4DD | 1 | 62 | 2 | |
| | | 5DD | 5 | 237-241 | 3 | |
| | | Subtotal | 6 | | | |
| Montgomery County | | | | | | |
| 1960s | | Subtotal | 0 | | | |
| Prince George's County | | | | | | |
| 10/13/1963 - 10/15/1963 | AHV | 1DD | 41 | 55-60, 68-77, 79-80, 82, 85-99, 102-108 | 2, 3 | |
| | | 2DD | 40 | 210, 215-225, 227-240, 242-244, 248-258 | 1, 4 | |
| | | 3DD | 225 | 14-38, 40-62, 69-76, 78, 87-93, 109-113, 115-139, 142-175, 179-213, 216-222, 224-249, 252-267, 284-296 | 1, 2, 3, 4 | |
| | | Subtotal | 306 | | | |

| Table A2-3: Aerial photographs (9"x9") held by MGS, flown during the period 1961-1968, by county | | | | | | |
|---|-------------|---------------|-----|--|------------|--|
| | | Frames | | | | |
| Queen Anne's County | | | | | | |
| 10/16/1963 – 5/2/1964 | AHW | 1DD | 19 | 11-29 | 1 | |
| | | 2DD | 37 | 43-64, 91-101, 103-106 | 2, 4 | |
| | | 3DD | 9 | 44-52 | 2 | |
| | | 4DD | 63 | 25-32, 63-82, 139-149, 190, 192, 194-195, 203, 205-208, 210, 212, 214, 246, 248-250, 252, 255, 257-258, 265, 267, 269, 273 | 2, 3, 4 | |
| | | 5DD | 52 | 49-61, 115-127, 173-184, 187, 230-236, 291-296 | 2, 3, 4 | |
| | | Subtotal | 180 | | | |
| 4/17/1964 | AHY (HW) | 4DD | 1 | 83 | 4 | |
| | | Subtotal | 181 | | | |
| Somerset County | | | | | | |
| 1960s | | Subtotal | 0 | | | |
| St. Mary's County | | | | | | |
| 5/4/1964 – 6/10/1964 | AHX | 1DD | 47 | 128-142, 159-162, 211-231, 286-292 | 1, 2, 3, 4 | |
| | | 2DD | 84 | 81-102, 106-121, 180-194, 216-233, 236-248 | 1, 4 | |
| | | 3DD | 55 | 20-38, 43-61, 121-129, 154-161 | 2, 3 | |
| | | 4DD | 58 | 9-10, 15-24, 76-95, 99-100, 102-109, 141-145, 147-157 | 1, 2, 3, 4 | |
| | | Subtotal | 244 | | | |
| Talbot County | | | | | | |

| Table A2-3: Aerial photographs (9"x9") held by MGS, flown during the period 1961-1968, by county | | | | | | |
|---|-----|---------------|-------|--|---------|--|
| | | Frames | | | | |
| 10/16/1963 – 5/21/1964 | AHY | 1DD | 3 | 3-5 | 1 | |
| | | 2DD | 8 | 32-39 | 1 | |
| | | 4DD | 73 | 84-107, 113-138, 175-176, 178-186, 233-241, 277-279 | 1, 2, 3 | |
| | | 5DD | 59 | 62-70, 92-110, 188-191, 193-205, 213-226 | 1, 2, 3 | |
| | | 6DD | 52 | 5-15, 20-27, 57-64, 66, 110-124, 131, 133-140 | 1, 2, 3 | |
| | | Subtotal | 195 | | | |
| Washington County | | | | | | |
| 10/7/1963 | AHB | 3DD | 66 | 11-13, 25-31, 35-44, 48-51, 55-59, 64- 68, 71-76, 81-88, 100-107, 113-122 | 2, 3 | |
| | | Subtotal | 66 | | | |
| Wicomico County | | | | | | |
| 1960s | | Subtotal | 0 | | | |
| Worcester County | | | | | | |
| 1960s | | Subtotal | 0 | | | |
| MARYLAND (All counties) | | | | | | |
| 10/18/1961 – 3/25/1968 | | TOTAL | 3,668 | | | |

MGS's Collection of Historical Aerial Photographs of Maryland, 1970-1979

| Table A2-4: Aerial photographs (9"x9") held by MGS, flown during the period 1970-1979 by county | | | | | | |
|--|------------|-------------|--------|---|--------------|----------------|
| Flight date(s) | Project ID | Flight line | Frames | | Index map ID | Archive box ID |
| | | | N | Frame nos. | | |
| Allegany County | | | | | | |
| 10/12/1971 – 10/8/1972 | AMN | 1MM | 52 | 3-11, 16-27, 30-44, 51-66 | 1 | MGS-AP- |
| | | 4MM | 65 | 3-15, 19-25, 30-47, 51-58, 60-65, 71-73, 75-84 | 2 | |
| | | 5MM | 35 | 156-161, 164, 192-202, 206-22 | 3 | |
| | | 6MM | 105 | 3-13, 17-30, 36-50, 77-90, 92, 96-112, 115-131, 135-150 | 1, 2 | |
| | | 7MM | 17 | 2-18 | 1 | |
| | | 8MM | 16 | 4-19 | 2 | |
| | | Subtotal | 290 | | | |
| Anne Arundel County | | | | | | |
| 6/14/1970 – 9/1/1970 | AHR | 1LL | 47 | 3-7, 9-19, 97-108, 112-123, 194-200 | 2 | MGS-AP- |
| | | 2LL | 51 | 7-19, 21-52, 64-69 | 1, 3 | |
| | | 3LL | 89 | 2-16, 18-56, 61-87, 89-96 | 1, 3 | |
| | | 4LL | 94 | 4-34, 43-79, 86-101, 103-112 | 1, 3 | |
| | | 5LL | 5 | 4-8 | 2 | |
| | | Subtotal | 286 | | | |
| 6/13/1979 | AA | 16 | 4 | 117-120 | ? | MGS-AP- |
| | | Subtotal | 4 | | | |
| | | Subtotal | 290 | | | |

| Table A2-4: Aerial photographs (9"x9") held by MGS, flown during the period 1970-1979 by county | | | | | | |
|--|-------|---------------|-----|---|------------|---------|
| | | Frames | | | | |
| Baltimore County | | | | | | |
| 8/13/1971 – 11/5/1971 | AJO | 1MM | 75 | 2-16, 20-44, 49-83 | 2, 3 | MGS-AP- |
| | | 2MM | 78 | 1-24, 30-66, 73-89 | 1, 3, 4 | |
| | | 3MM | 52 | 3-54 | 1, 4 | |
| | | 4MM | 90 | 1-2, 4-18, 59-78, 80, 83-106, 112-139 | 1, 2, 4 | |
| | | 5MM | 8 | 29-33, 35, 37, 39 | 4 | |
| | | 6MM | 110 | 43-56, 59-82, 87-125, 130-148, 153-166 | 2, 3 | |
| | | 7MM | 23 | 41-63 | 1, 4 | |
| | | Subtotal | 436 | | | |
| 5/18/1979 | BA | 15 | 5 | 127-131 | ? | |
| | | Subtotal | 5 | | | |
| | | Subtotal | 441 | | | |
| Calvert County | | | | | | |
| 11/8/1971 – 11/12/1971 | AHS | 2MM | 179 | 5-19, 23-48, 56-82, 87-113, 120-144, 148-173, 183-196, 202-212, 215-222 | 1, 2 | |
| | | Subtotal | 179 | | | |
| Caroline County | | | | | | |
| 10/3/1972 | 24011 | 172 | 70 | 1-9, 23-33, 35-39, 41-43, 45-49, 51-56, 85-110, 141-145 | 1, 2, 3, 4 | |
| | | Subtotal | 70 | | | |

| Table A2-4: Aerial photographs (9"x9") held by MGS, flown during the period 1970-1979 by county | | | | | | | |
|--|-------|---------------|-----|---|---------|---------|--|
| | | Frames | | | | | |
| Carroll County | | | | | | | |
| 6/13/1970 – 7/6/1970 | AGZ | 1LL | 191 | 37-62, 68-97, 101-129, 132-144, 148-152, 154-164, 166-183, 187-215, 219-248 | 1, 2, 3 | MGS-AP- | |
| | | 2LL | 28 | 2-29 | 2, 3 | | |
| | | 3LL | 29 | 3-10, 13-16, 56-66, 81, 129-131, 146-147 | 2 | | |
| | | 5LL | 30 | 2-31 | 1, 3 | | |
| | | Subtotal | 278 | | | | |
| 7/8/1979 – 9/16/1979 | 24013 | 179 | 8 | 15-16, 21-26 | 2, 3 | | |
| | | 279 | 4 | 143-146 | 2 | | |
| | | Subtotal | 12 | | | | |
| | | Subtotal | 290 | | | | |
| Cecil County | | | | | | | |
| 1970s | | Subtotal | 0 | | | | |
| Charles County | | | | | | | |
| 10/12/1971 – 10/31/1972 | AHU | 2MM | 15 | 5-12, 41-47 | 2 | MGS-AP- | |
| | | 6MM | 1 | 33 | 2 | | |
| | | 7MM | 1 | 19 | 1 | | |
| | | 8MM | 85 | 125-127, 133-138, 180-189, 191-203, 207-225, 229-230, 232, 234-240, 242-247, 252-262, 264-270 | 1, 2, 4 | | |
| | | 9MM | 15 | 3-8, 10-12, 14-19 | 2, 4 | | |
| | | 10MM | 9 | 4-10, 12-13 | 1 | | |

| Table A2-4: Aerial photographs (9"x9") held by MGS, flown during the period 1970-1979 by county | | | | | | | | |
|--|-------|---------------|-----|---|--|------------------|---------|------|
| | | Frames | | | | | | |
| | | 11MM | 22 | 3-24 | | | | 1, 3 |
| | | 12MM | 81 | 3-37, 39-55, 57-61, 66-80, 82-90 | | | | 1, 3 |
| | | 14MM | 10 | 6-10, 12-16 | | | | 1 |
| | | Subtotal | 239 | | | | | |
| 5/6/1979 – 10/8/1979 | CH | 31 | 1 | 128 | | ? | | |
| | | 32 | 5 | 120-123, 126 | | ? | | |
| | | 33 | 1 | 105 | | ? | | |
| | | Subtotal | 7 | | | | | |
| | | Subtotal | 246 | | | | | |
| Dorchester County | | | | | | | | |
| 10/3/1972 | 24019 | 172 | 4 | 21, 57, 83, 187 (duplicates of all but 83) | | ? | MGS-AP- | |
| | | Subtotal | 4 | | | | | |
| Frederick County | | | | | | | | |
| 6/23/1970 | AHA | 3LL | 46 | 17-20, 23-31, 37-42, 51-55, 70-80, 82-83, 126-128, 132-134, 144-145, 148 | | 1 | MGS-AP- | |
| | | Subtotal | 46 | | | | | |
| 7/6/1979 - 9/16/1979 | 24021 | 179 | 4 | 17-20 | | 3 | | |
| | | 279 | 83 | 2-8, 12-23, 29, 31, 33, 35, 37, 39, 47, 55-82, 85-88, 107-121, 135-142, 147-148 | | 1, 2, 3, 4, 5, 6 | | |
| | | Subtotal | 87 | | | | | |
| | | Subtotal | 133 | | | | | |

| Table A2-4: Aerial photographs (9"x9") held by MGS, flown during the period 1970-1979 by county | | | | | | |
|--|-----|---------------|-----|---|------|---------|
| | | Frames | | | | |
| Garrett County | | | | | | |
| 5/26/1972 – 10/10/1972 | AMO | 5MM | 134 | 2-4, 7-12, 15-17, 25-35, 39-43, 45-46, 49-51, 54-55, 59-67, 70-75, 77-83, 85-92, 96-97, 100-102, 105-111, 114-117, 123-125, 128-133, 136-152, 165-169, 173, 175-176, 179-182, 184-185, 188-192, 195-199, 223-224, 227 | ? | MGS-AP- |
| | | 8MM | 51 | 23-36, 39-43, 45-48, 53, 56-71, 73-83 | ? | |
| | | 9MM | 130 | 2, 5-6, 8-26, 29-31, 33-36, 41-43, 46-55, 59-64, 67-74, 78-80, 83-85, 88-99, 101-103, 110-111, 119, 123-130, 132-146, 148-151, 154-156, 161-162, 165-166, 169, 171-174, 177-181, 184-186, 189-191 | ? | |
| | | Subtotal | 315 | *Access thinks there are 316 Garrett Co. frames – can't find discrepancy | | |
| Harford County | | | | | | |
| 10/11/1971 – 11/5/1971 | ANK | 4MM | 8 | 19-21, 57-58, 107, 140-141 | 2, 3 | MGS-AP- |
| | | 5MM | 7 | 22-28 | 3 | |
| | | 7MM | 3 | 38-40 | 2 | |
| | | Subtotal | 18 | | | |
| Howard County | | | | | | |
| 6/28/1970 – 9/29/1970 | NP | 1LL | 18 | 11-28 | 1 | MGS-AP- |
| | | 3LL | 94 | 15-30, 35-52, 58-77, 82-95, 99, 118-126, 133-142, 145-150 | 1 | |
| | | 4LL | 45 | 17-21, 75-83, 86-95, 138-148, 152- | 2 | |

| Table A2-4: Aerial photographs (9"x9") held by MGS, flown during the period 1970-1979 by county | | | | | | |
|--|-------|---------------|-----|--|-------------------------|------|
| | | Frames | | | | |
| | | | | 161 | | |
| | | 5LL | 8 | 4-11 | 1 | |
| | | Subtotal | 165 | | | |
| 5/18/1979 – 6/13/1979 | HO | | 15 | 1 | 126 | ? |
| | | | 16 | 2 | 115-116 | ? |
| | | Subtotal | 3 | | | |
| 9/16/1979 | 24027 | | 179 | 2 | 13-14 | 2 |
| | | Subtotal | 2 | | | |
| | | Subtotal | 170 | | | |
| Kent County | | | | | | |
| 9/10/1972 | 24029 | | 272 | 1 | 65 | ? |
| | | Subtotal | 1 | | | |
| Montgomery County | | | | | | |
| 7/7/1979 – 7/8/1979 | 24031 | | 279 | 6 | 53, 89-90, 105-106, 134 | 1, 2 |
| | | Subtotal | 6 | | | |
| Prince George's County | | | | | | |
| 6/14/1970 – 9/1/1970 | AHV | 1LL | 87 | 20-33, 35-40, (odd nos. from 41-55), (odd nos. from 59-93), 94-96, 124, (odd nos. from 125-131), (odd nos. from 135-137), (even nos. from 138-140), (odd nos. from 141-147), (even nos. from 166-184), 188, 190-193, (odd nos. from 215-233) | | 1, 4 |
| | | 3LL | 4 | (even nos. from 105-111) | | 4 |

| Table A2-4: Aerial photographs (9"x9") held by MGS, flown during the period 1970-1979 by county | | | | | | |
|--|-------|----------|---------------|--|------------|--|
| | | | Frames | | | |
| | | 5LL | 112 | 9-12, (odd nos. from 13-27), (even nos. from 30-36), (odd nos. from 39-45), 51-58, (odd nos. from 59-87), (even nos. from 92-122), 123-130, (odd nos. from 133-139), 140, (odd nos. from 141-167), (odd nos. from 175-181), (odd nos. from 185-193), 194-195, (even nos. from 196-200), (even nos. from 204-218, (odd nos. from 227-233) | 2, 3 | |
| | | Subtotal | 203 | | | |
| 7/7/1979 – 10/8/1979 | PG | 29 | 4 | 124-127 | ? | |
| | | 30 | 5 | 122-126 | ? | |
| | | 31 | 5 | 129-133 | ? | |
| | | 32 | 2 | 124-125 | ? | |
| | | Subtotal | 16 | | | |
| | | Subtotal | 219 | | | |
| Queen Anne's County | | | | | | |
| 9/10/1972 | 24035 | 272 | 3 | 86, 101-102 | ? | |
| | | Subtotal | 3 | | | |
| Somerset County | | | | | | |
| 10/2/1972 | 24039 | 272 | 28 | (odd nos. from 11-15), 16-19, (odd nos. from 25-35), 59, (even nos. from 60-82), 104, 106 | 1, 2, 3, 4 | |
| | | Subtotal | 28 | | | |

| Table A2-4: Aerial photographs (9"x9") held by MGS, flown during the period 1970-1979 by county | | | | | | |
|--|-------|---------------|-----|---|------------|--|
| | | Frames | | | | |
| St. Mary's County | | | | | | |
| 10/12/1971 – 10/15/1972 | AHX | 2MM | 34 | 61-73, 79-82, 171-173, 175-181, 183-189 | 1, 2, 3, 4 | |
| | | 4MM | 43 | 46-50, 52, 54-63, 66-82, 88-97 | 1, 4 | |
| | | 5MM | 8 | 22-29 | 3 | |
| | | 7MM | 26 | 20-45 | 2, 3 | |
| | | 8MM | 117 | 3-11, 25-30, 32-36. 39-47, 49-79, 83-99, 101-115, 117-124, 139-140, 142-152, 154-157 | 1, 2, 3, 4 | |
| | | 10MM | 1 | 14 | 2 | |
| | | 13MM | 21 | 1-21 | 2, 3 | |
| | | Subtotal | 250 | | | |
| Talbot County | | | | | | |
| 8/20/1972 – 9/10/1972 | 24041 | 172 | 18 | 44-51, 66-75 | ? | |
| | | 272 | 38 | 16-27, 29-36, 71-83, 105-109 | ? | |
| | | Subtotal | 56 | | | |
| Washington County | | | | | | |
| 6/8/1970 – 6/14/1970 | AHB | 1LL | 67 | 1-2, 4-14, 19, 21-41, 43-49, 53-55, 57, 59-79 | 1, 4 | |
| | | 2LL | 46 | 5, 7-9, 11-23, 28-39, 45-46, 48-52, 54, (even nos. from 58-64), 65, 68-71 | 1, 4 | |
| | | 3LL | 200 | 3-7, 9-12, 14-22, 26-29, (even nos. from 30-36), 44-45, (even nos. from 46-50), 55-59, 61, 64-68, 73-75, 80-82, 84-86, 89-95, 97, 101-109, 111- | 1, 2, 3, 4 | |

| Table A2-4: Aerial photographs (9"x9") held by MGS, flown during the period 1970-1979 by county | | | | | | |
|--|-------|----------|-------|---|------------|--|
| | | | | Frames | | |
| | | | | 112, 115-126, 130-132, 134-138, 141, 147-158, 162-164, 166-176, 181-183, 185-187, 189-197, 199, 202-206, 208-222, 224, 227-229, 231-249, 251-255, 257, 261-278 | | |
| | | Subtotal | 313 | | | |
| Wicomico County | | | | | | |
| 10/2/1972 | 24045 | 272 | 29 | (even nos. from 4-8), 9, (even nos. from 36-40), (odd nos. from 51-57), (even nos. from 84-90), 98-100, (even nos. from 120-122), (even nos. from 130-134), (even nos. from 158-162), (odd nos. from 167-171) | 1, 2, 3 | |
| | | Subtotal | 29 | | | |
| Worcester County | | | | | | |
| 9/10/1972 – 10/2/1972 | 24047 | 172 | 14 | 3, 7, 9, 12-13, (even nos. from 16-20), (odd nos. from 25-35) | 1, 2 | |
| | | 272 | 22 | (even nos. from 108-118), (even nos. from 136-144), 145, (odd nos. from 149-157), (odd nos. from 173-181) | 1, 2, 3, 4 | |
| | | Subtotal | 36 | | | |
| MARYLAND (All counties) | | | | | | |
| | | TOTAL | 3,387 | | | |

MGS's Collection of Historical Aerial Photographs of Maryland, 1980-1989

| Table A2-5: Aerial photographs (9"x9") held by MGS, flown during the period 1980-1989 by county | | | | | | |
|--|-------------------|--------------------|---------------|---|---------------------|-----------------------|
| Flight date(s) | Project ID | Flight line | Frames | | Index map ID | Archive box ID |
| | | | N | Frame nos. | | |
| Allegany County | | | | | | |
| 5/21/1981 – 9/25/1981 | 24001 | 280 | 8 | 84-91 | ? | MGS-AP- |
| | | 380 | 32 | 63-65, 70-75, 82-88, 93-98, 112-116, 122-126 | ? | |
| | | 480 | 3 | 4-6 | ? | |
| | | Subtotal | 43 | | | |
| 8/1/1989 – 9/1/1989 | VW | 898 | 11 | 1-10, 22 (really 29-1, 28-2, 27-3, 26-4, 25-5, 24-6, 23-7, 22-8, 21-9, 20-10, 74-22) | 1 | |
| | | 899 | 41 | 11-24, 26-52 (really 45-11, 46-12, 47-13, 48-14, 49-15, 50-16, 51-17, 52-18, 53-19, 54-20, 87-21, 86-22, 85-23, 84-24, 82-26, 81-27, 80-28, 79-29, 78-30, 77-31, 76-32, 100-33, 101-34, 102-35, 103-36, 104-37, 105-38, 106-39, 107-40, 108-41, 109-42, 110-43, 111-44, 133-45, 132-46, 131-47, 130-48, 146-49, 147-50, 148-51, 149-52) | 1 | |
| | | Subtotal | 95 | | | |

| Table A2-5: Aerial photographs (9"x9") held by MGS, flown during the period 1980-1989 by county | | | | | | |
|--|-------|----------|---------------|--|------|---------|
| | | | Frames | | | |
| Anne Arundel County | | | | | | |
| 10/1/1987 | VW | 8710 | 42 | 1-42 (really, 204-1, 221-2, 236-3, 307-4, 203-5, 222-6, 235-7, 308-8, 335-9, 326-10, 202-11, 223-12, 234-13, 309-14, 334-15, 327-16, 201-17, 224-18, 233-19, 310-20, 333-21, 328-22, 200-23, 225-24, 232-25, 311-26, 332-27, 329-28, 199-29, 226-30, 231-31, 312-32, 331-33, 330-34, 198-35, 227-36, 230-37, 313-38, 197-39, 228-40, 229-41, 314-42) | 1 | MGS-AP- |
| | | Subtotal | 42 | | | |
| Baltimore County | | | | | | |
| 8/1/1987 – 10/1/1987 | VW | 878 | 1 | 26 (really 54-26) | 1 | MGS-AP- |
| | | 879 | 2 | 13, 19 (really 654-13, 655-19) | | |
| | | 8710 | 49 | 1-12, 14-18, 20-25, 27-52 (all of these have a unique numerical prefix) | | |
| | | Subtotal | 52 | | | |
| Calvert County | | | | | | |
| 6/21/1980 | 24009 | 180 | 34 | 20, 22, 27-31, 51-59, 67-76, 96-103 | 1, 2 | |
| | | Subtotal | 34 | | | |
| Caroline County | | | | | | |
| 8/1/1988 – 9/1/1988 | VW | 888 | 29 | 5, 8-11, 14-17, 20-22, 25-27, 30-32, 35-38, 41-47 (all of these have a | 1 | |

| Table A2-5: Aerial photographs (9"x9") held by MGS, flown during the period 1980-1989 by county | | | | | | |
|--|-------|---------------|----|--|------------|---------|
| | | Frames | | | | |
| | | | | unique numerical prefix) | | |
| | | 889 | 18 | 1-4, 6-7, 12-13, 18-19, 23-24, 28-29, 33-34, 39-40 (all of these have a unique numerical prefix) | 1 | |
| | | Subtotal | 47 | | | |
| Carroll County | | | | | | |
| 5/5/1980 | 24013 | 379 | 41 | 3-13, 42-53, 58-68, 92-98 | 1, 2, 3, 4 | MGS-AP- |
| | | Subtotal | 41 | | | |
| 8/1/1987 – 9/1/1987 | VW | 878 | 32 | 1-5, 8-11, 15-19, 22-39 (all of these have a unique numerical prefix) | 1 | |
| | | 879 | 7 | 6-7, 12-14, 20-21 | 1 | |
| | | Subtotal | 39 | | | |
| | | Subtotal | 80 | | | |
| Cecil County | | | | | | |
| 8/1/1987 – 10/1/1987 | VW | 878 | 11 | 8, 14-15, 20-21, 25-26, 30-31, 36-37 | 1 | MGS-AP- |
| | | 8710 | 25 | 1-7, 9-13, 16-19, 22-24, 27-29, 32, 34-35 (all of these have a unique numerical prefix) | 1 | |
| | | Subtotal | 36 | | | |
| Charles County | | | | | | |
| 5/6/1980 – 7/7/1980 | 24017 | 280 | 9 | 4-6, 26-31 | 1 | MGS-AP- |
| | | 380 | 60 | 4-29, 37-42, 45-46, 49-58, 65-72, 76-83 | 1, 2, 3, 4 | |
| | | Subtotal | 69 | | | |
| 3/13/1983 | CH | 4 | 8 | 76-83 | ? | |

| Table A2-5: Aerial photographs (9"x9") held by MGS, flown during the period 1980-1989 by county | | | | | | | |
|--|-------|----------|---------------|--|---|---------|--|
| | | | Frames | | | | |
| | | 5 | 8 | 84-91 | ? | | |
| | | 6 | 7 | 128-134 | ? | | |
| | | 33 | 5 | 104, 106-109 | ? | | |
| | | 34 | 6 | 115-120 | ? | | |
| | | Subtotal | 34 | | | | |
| | | Subtotal | 103 | | | | |
| Dorchester County | | | | | | | |
| 6/17/1980 | 24019 | 180 | 5 | 133-135, 142-143 | 3 | MGS-AP- | |
| | | Subtotal | 5 | | | | |
| 8/1/1988 – 9/1/1988 | VW | 888 | 48 | 3-10, 13-22, 25-34, 37-44, 47-53, 56-58, 60, 62 (all of these have a unique numerical prefix) | 1 | | |
| | | 889 | 18 | 1-2, 11-12, 23-24, 35-36, 45-46, 54-55, (odd nos. from 59-63), 64-66 (all of these have a unique numerical prefix) | 1 | | |
| | | Subtotal | 66 | | | | |
| | | Subtotal | 71 | | | | |
| Frederick County | | | | | | | |
| 8/1/1988 | VW | 888 | 72 | 1-72 (all of these have a unique numerical prefix) | 1 | | |
| | | Subtotal | 72 | | | | |
| Garrett County | | | | | | | |
| 5/21/1981 – 9/25/1981 | 24023 | 280 | 43 | 16-25, 31-35, 37-43, 47-60, 65-71 | ? | MGS-AP- | |
| | | 380 | 24 | 144-149, 156-163, 170-179 | ? | | |

| Table A2-5: Aerial photographs (9"x9") held by MGS, flown during the period 1980-1989 by county | | | | | | |
|--|-------|---------------|----|---|------|---------|
| | | Frames | | | | |
| | | 480 | 15 | (even nos. from 28-32), 33-34, 39-47, 56 | ? | |
| | | Subtotal | 82 | | | |
| Harford County | | | | | | |
| 10/1/1987 | VW | 8710 | 36 | 1- 27, 29-37 (all of these have a unique numerical prefix, e.g., VW 8710- 299 -1, for frame 1) | 1 | MGS-AP- |
| | | Subtotal | 36 | | | |
| Howard County | | | | | | |
| 5/5/1980 | 24027 | 379 | 2 | 14, 69 | 1, 2 | MGS-AP- |
| | | Subtotal | 2 | | | |
| 8/1/1987 – 10/1/1987 | VW | 878 | 14 | 1-12, 14-15 (all of these have a unique numerical prefix, e.g., VW 878- 25 -1, for frame 1) | 1 | |
| | | 8710 | 1 | 13 (i.e., VW 8710- 195 -13) | 1 | |
| | | Subtotal | 15 | | | |
| | | Subtotal | 17 | | | |
| Kent County | | | | | | |
| 8/1/1988 – 9/1/1988 | VW | 888 | 26 | 2-5, 8, 10-13, 16-22, 24-29, 31-32, 35-36 (all of these have a unique numerical prefix, e.g., VW 888- 273 -2, for frame 2) | 1 | |
| | | 889 | 8 | 1, 6-7, 9, 14-15, 23, 30 (all of these have a unique numerical prefix) | 1 | |
| | | Subtotal | 34 | | | |

| Table A2-5: Aerial photographs (9"x9") held by MGS, flown during the period 1980-1989 by county | | | | | | |
|--|----|----------|---------------|---|---|--|
| | | | Frames | | | |
| Montgomery County | | | | | | |
| 5/1/1989 | VW | 895 | 72 | 1-72 (all of these have a unique numerical prefix, e.g., VW 895-7-1, for frame 1) | 1 | |
| | | Subtotal | 72 | | | |
| Prince George's County | | | | | | |
| 3/1/1984 | V | 843 | 19 | 2-2, 1-3, 3-4, 2-4, 1-5, 2-6, 1-7, 3-8, 2-8, 1-9, 2-10, 3-10, 2-12, 3-12, 3-14, 2-14, 3-16, 3-18, 2-18 (all of these have a unique numerical prefix, e.g., V 843-98-2-2, for frame 2-2) | ? | |
| | | Subtotal | 19 | | | |
| 8/1/1986 – 8/1/1989 | VW | 868 | 1 | 4 (i.e., VW 868-208-4) | 1 | |
| | | 896 | 24 | 1-2, 5-6, 9-10, 15-16, 21-24, 29-32, 37-40, 45-48 (all of these have a unique numerical prefix, e.g., VW 896-105-1, for frame 1) | 1 | |
| | | 898 | 23 | 8, 11, 13-14, 18-20, 25-28, 33-36, 41-44, 49-52 (all of these have a unique numerical prefix, e.g., VW 898-118-8, for frame 8) | 1 | |
| | | Subtotal | 48 | | | |
| | | Subtotal | 67 | | | |

| Table A2-5: Aerial photographs (9"x9") held by MGS, flown during the period 1980-1989 by county | | | | | | |
|--|-------|---------------|----|---|------------|--|
| | | Frames | | | | |
| Queen Anne's County | | | | | | |
| 8/1/1986 – 8/1/1989 | VW | 868 | 4 | 15-16, 21-22 (all of these have a unique numerical prefix, e.g., VW 868- 76 -15, for frame 15) | 1 | |
| | | 888 | 4 | 15-16, 21-22 (all of these have a unique numerical prefix, e.g., VW 888- 278 -15, for frame 15) | 1 | |
| | | 898 | 39 | 1-21, 23-40 (all of these have a unique numerical prefix, e.g., VW 898- 54 -1, for frame 1) | 1 | |
| | | Subtotal | 47 | | | |
| Somerset County | | | | | | |
| 3/16/1980 | 24039 | 180 | 3 | 131, 154, 176 | 1 | |
| | | Subtotal | 3 | | | |
| 8/1/1988 – 9/1/1988 | VW | 888 | 42 | 2-6, 8-13, 16-21, 24-28, 31, 34-38, 40, 43-47, 49, 52-54, 56, 59-61 (all of these have a unique numerical prefix, e.g., VW 888- 178 -2, for frame 2) | 1 | |
| | | 889 | 17 | 1, 7, 14-15, 22-23, 29-30, 32-33, 39, 41, 48, 51, 55, 57-58 (all of these have a unique numerical prefix, e.g., VW 889- 250 -1, for frame 1) | 1 | |
| | | Subtotal | 59 | | | |
| | | Subtotal | 62 | | | |
| St. Mary's County | | | | | | |
| 6/21/1980 – | 24037 | 180 | 38 | 5, 7, 10-18, 32-33, 35-38, 41-47, 49, | 1, 2, 3, 4 | |

| Table A2-5: Aerial photographs (9"x9") held by MGS, flown during the period 1980-1989 by county | | | | | | |
|--|-------|---------------|----|---|------|--|
| | | Frames | | | | |
| 7/7/1980 | | | | 78-81, 86, 88, 89-95 | | |
| | | 280 | 15 | 7-10, 12-15, 19-25 | 2, 3 | |
| | | Subtotal | 53 | | | |
| Talbot County | | | | | | |
| 4/22/1980 | 24041 | 180 | 13 | 119-125, 127-132 | 2 | |
| | | Subtotal | 13 | | | |
| 8/1/1988 | VW | 888 | 30 | 1-4, 6-31 (all of these have a unique numerical prefix, e.g., VW 888- 280 -1, for frame 1) | 1 | |
| | | Subtotal | 30 | | | |
| | | Subtotal | 43 | | | |
| Washington County | | | | | | |
| 10/6/1980 – 5/22/1981 | 24043 | 180 | 38 | 1-6, 12-23, 26-29, 31-37, 43-51 | ? | |
| | | 280 | 3 | 9-11 | ? | |
| | | Subtotal | 41 | | | |
| 3/1/1987 | V | 873 | 9 | 5-5, 7-6, 6-6, 5-7, 7-8, 6-8, 5-10, 7-11, 6-11 (all of these have a unique numerical prefix, e.g., V 873- 702 -5-5, for frame 5-5) | ? | |
| | | Subtotal | 9 | | | |
| 8/1/1989 – 9/1/1989 | VW | 898 | 14 | 1-14 (all of these have a unique numerical prefix, e.g., VW 898- 19 -1, for frame 1) | 1 | |
| | | 899 | 39 | 15-53 (all of these have a unique numerical prefix, e.g., VW 899- 55 -15, | 1 | |

| Table A2-5: Aerial photographs (9"x9") held by MGS, flown during the period 1980-1989 by county | | | | | | |
|--|-------|----------|---------------|---|---------|--|
| | | | Frames | | | |
| | | | | for frame 15) | | |
| | | Subtotal | 53 | | | |
| | | Subtotal | 103 | | | |
| Wicomico County | | | | | | |
| 3/16/1980 | 24045 | 180 | 28 | | 1, 2, 3 | |
| | | Subtotal | 28 | | | |
| 8/1/1986 8/1/1988 | VW | 868 | 12 | 1-7, 9-13 (all of these have a unique numerical prefix, e.g., VW 868- 245 -1, for frame 1) | 1 | |
| | | 869 | 1 | 39 (i.e., VW 869-21-39) | 1 | |
| | | 888 | 3 | 8, 17-18 (all of these have a unique numerical prefix, e.g., VW 888- 215 -8, for frame 8) | 1 | |
| | | 8610 | 36 | 14-16, 19-38, 40-52 (all of these have a unique numerical prefix, e.g., VW 8610- 53 -14, for frame 14) | 1 | |
| | | Subtotal | 52 | | | |
| | | Subtotal | 80 | | | |
| Worcester County | | | | | | |
| 9/1/1985 | VW | 859 | 57 | 1-16, 18-58 (all of these have a unique numerical prefix, e.g., VW 859- 61 -1, for frame 1) | 1 | |
| | | Subtotal | 57 | | | |
| MARYLAND (All counties) | | | | | | |
| | | TOTAL | 1,385 | | | |

NGGDPP METADATA FORM

Historical Aerial Photographs of Maryland, 1936-1990

MGS Collection ID: 28
Original NGDPP ID: P1603
ScienceBase ID: 4f4e4a94e4b07f02db658dba

November 2013

Sources of Information:

- Information embedded, stamped and/or handwritten on the aerial photographs or associated index maps and stored in the internal MGS Microsoft Access databases AirPhotoIndex.mdb and DataPreservation.mdb
- USGS *ScienceBase Catalog* (collection ID)
- 2006 *Implementation Plan for the National Geological and Geophysical Data Preservation Program*, Appendix 2 (data type)
[<http://datapreservation.usgs.gov/docs/2006DataPreservation.pdf>]
- USGS Geographic Names Information System (GNIS) website
[<http://geonames.usgs.gov/domestic/>] (geographic coordinates)
- The Johns Hopkins University *JScholarship* website *Aerial Photography - Baltimore (1927, 1937, 1948, 1952, 1964, 1972)*
[<https://jscholarship.library.jhu.edu/handle/1774.2/32749>]

CollectionID

Definition: NGDPP collection identification number

Value: “4f4e4a94e4b07f02db658dba”

(*ScienceBase Catalog* ID for the collection *Historical Aerial Photographs of Maryland, 1936-1990*)

Source: Generated by the *ScienceBase Catalog* upon submittal of a collection inventory for *Historical Aerial Photographs of Maryland, 1936-1990*; stored internally in DataPreservation.mdb – tblCollection – field “ScienceBaseID”

Title

Definition: Official, human-readable title for individual record, used in listings & search results (short, distinctive) – mandatory

Value: A concatenation of three standard elements representing the flight/project area and film used in the production of the photo, separated by dashes (i.e., flight/project area – film negative roll – frame number)

Source: Embedded in upper right corner of aerial photograph; elements comprising the title are stored as two separate fields in the Air Photo Index database – tblAirPhoto and tblAirPhoto2 – fields “Flight Line” and “Frame” (in the database, the field “Flight Line” includes both the flight/project and the film negative roll, separated by a dash)

Examples:

- AMN-1-1 (Flight Line = AMN-1; Frame = 1)
- ANK (JO)-5DD-212 (Flight Line = ANK (JO)-5DD; Frame = 212)
- AHU-2-176 (Flight Line = AHU-2; Frame = 176)
- 24003-179-101 (Flight Line = 24003-179; Frame = 101)

Alternate Title

Definition: Additional title identifiers for individual record (e.g., for further identification by other Web service interfaces); textual titles or specific sample IDs used by collection – optional

Value: None at present, although it could include the database key field *AirPhotoID*, with an appropriate reference to the associated AirPhoto table

Abstract

Definition: Human-readable description of individual record, used to help determine nature of underlying physical data resource; contains much information about data resource – mandatory

Value: “unrectified, black-and-white aerial photograph, 9 in. x 9 in. in size, flown over [county name] County, Maryland, on [date of flight]; photo associated with Index Map [#] see (*alternateTitle* field in MGS collection *Historical Air Photo Index Maps of Maryland, 1936-1980*)”

Source: A concatenation of information stored in the Air Photo Index database, linked by text (i.e., tblAirPhoto and tblAirPhoto2 – fields *County Name*, *Date*, and *Index Map ID*)

Data Type

Definition: A controlled vocabulary of one or more data types - mandatory

Value: “Photograph”

Source: Determined by MGS, based on the list of data types provided in Appendix 2 of the 2006 NGGDPP *Implementation Plan*

Supplemental Information

Definition: Information on how to access physical data represented by metadata record (e.g., general for entire collection, such as URL, or specific reference to online resource, like ordering system with specific ID) - mandatory

Value: “Contact the MGS curator at (410) 554-5500 for additional information.”

Source: n/a

Coordinates

Definition: Geographic coordinates (longitude, latitude), in decimal degrees – mandatory

Value: (-)decimal longitude, decimal latitude

This field presently contains the centroid of the county over which the photography was flown (Table A2-6).

Source: Geographic Names Information System (GNIS)

| Table A2-6: Geographic coordinates (NAD83) of county centroids, from the Geographic Names Information System (GNIS), January 2011 (Feature class = Civil) | | | | |
|--|-----------------------|------------------------|-----------------------------|------------------------------|
| County | Latitude (DMS) | Longitude (DMS) | Latitude (dec. deg.) | Longitude (dec. deg.) |
| Allegany | 394000N | 0783959W | 39.666667 | -78.666389 |
| Anne Arundel | 390000N | 0763659W | 39. | -76.616389 |
| Baltimore | 392800N | 0763859W | 39.466667 | -76.649722 |
| Baltimore City | 391725N | 0763644W | 39.290278 | -76.612222 |
| Calvert | 383300N | 0763459W | 38.55 | -76.583056 |
| Caroline | 385200N | 0754959W | 38.866667 | -75.833056 |
| Carroll | 393300N | 0770059W | 39.55 | -77.016389 |
| Cecil | 393400N | 0755659W | 39.566667 | -75.949722 |
| Charles | 382900N | 0765859W | 38.483333 | -76.983056 |
| Dorchester | 382800N | 0755959W | 38.466667 | -75.999722 |
| Frederick | 392800N | 0772359W | 39.466667 | -77.399722 |
| Garrett | 393300N | 0791459W | 39.55 | -79.249722 |
| Harford | 393300N | 0761759W | 39.55 | -76.299722 |
| Howard | 391501N | 0765559W | 39.250278 | -76.933056 |
| Kent | 391800N | 0760159W | 39.3 | -76.033056 |
| Montgomery | 390900N | 0771159W | 39.15 | -77.199722 |
| Prince Georges | 385000N | 0765059W | 38.833333 | -76.849722 |
| Queen Anne's | 390400N | 0755859W | 39.066667 | -75.983056 |
| Somerset | 380800N | 0754359W | 38.133333 | -75.733056 |
| St. Mary's | 381800N | 0763659W | 38.3 | -76.616389 |
| Talbot | 384600N | 0760459W | 38.766667 | -76.083056 |
| Washington | 393700N | 0774559W | 39.616667 | -77.766389 |
| Wicomico | 382200N | 0753559W | 38.366667 | -75.599722 |
| Worcester | 381200N | 0752259W | 38.2 | -75.383056 |

AlternateGeometry

Definition: Alternate method of storing geospatial footprint; description of authoritative source of geographic location & how simple coordinates derived – optional

Value: “Geographic coordinates (NAD83) represent centroid of [county name] Co., MD, from the U.S. Geological Survey's Geographic Names Information System (GNIS)”

Source: n/a

OnlineResource

Definition: URL pointer(s) to textual information about specific record - optional

Value: none supplied

Source: n/a

BrowseGraphic

Definition: URL pointer(s) to images representing specific record - optional

Value:

For Baltimore City and Baltimore County aerial photos flown in 1937-1938

[<https://jscholarship.library.jhu.edu/handle/1774.2/32802>]

For Baltimore City and Baltimore County aerial photos flown in 1952-1953

[<https://jscholarship.library.jhu.edu/handle/1774.2/32827>]

Source: The Johns Hopkins University *JScholarship* website

Date

Definition: Meaningful date (e.g., collection date) attached to record; may be to any degree of precision or left blank (e.g., 20010101, 1939-1945, -20030331, 2000) - optional

Value: Date on which the aerial photo was flown, in YYYYMMDD format

Source: Embedded in upper left corner of aerial photograph

Examples: Dates as they occur on the photos, “APR -5 1938” or “AUG 23 1952,” for example, are reformatted, respectively, as follows: “19380405” or “19520823”

DatasetReferenceDate

Definition: Reference date indicating currency of underlying data record (e.g., date metadata record added to National Catalog); format=YYYYMMDD - mandatory

Value: Date record provided to NCGDPP for uploading to the *ScienceBase Catalog*, in YYYYMMDD format, namely “20130821”

Source: Provided by curator

VerticalExtent

Definition: Vertical extent (e.g., vertical depth information for rock core samples); contains 2-3 elements: unit of measure, max value, min value (e.g., m, 35.4, 0 => rock core measured at 35.4 total meters)

Value: n/a

Source: n/a

Additional Information about the Sources, Photos, Etc.

MGS digitized 5,711 of the documented photos as part of the 2012-2013 NCGDPP grant and transferred the digital images to the Maryland State Archives (MSA). Once the photos are uploaded to the Internet, MGS will transfer the original photos to MSA for permanent preservation.

APPENDIX 3

Historical Aerial Photographs of the Rockville-Laurel Area, Montgomery County, Maryland, 1966-1974

MGS Collection ID: 36
 Original NGGDPP ID: n/a
 ScienceBase ID: 5069f121e4b046e0dfdbbc73

<https://www.sciencebase.gov/catalog/item/5069f121e4b046e0dfdbbc73>

November 2013

COLLECTION DESCRIPTION

A component of MGS’s collection of aerial photographs, this special collection consists of 12 sets of enlarged, unrectified, black-and-white aerial photographs flown annually or biannually between June 1966 and July 1974 (Table A3-1). Based on information included on a single index map associated with the July 2, 1974 aerial photos, the photography was flown over the sections of Montgomery County located in the Rockville-Laurel area. Labels affixed to the upper right corner of photos flown on Jan. 16, 1967, provide the name of the major town or community visible in each of those photos (see Table A3-2). Those labels and similar ones attached to photos flown on Dec. 8, 1967, also tie the photos to the then-current ADC atlas for Montgomery County.

Each of the 176 photos in the collection is about 20” x 20” in size. In addition to the photos, a single 8.5” x 11” index map covering only the photos flown on July 2, 1974, is included in a companion collection – *Historical Air Photo Index Maps of Maryland, 1936-1980*. From information included on that index map, the photography was flown by Air Photographics, Inc. for the Topographic Division of the U.S. Geological Survey.

| Date(s) | Project ID | Flight line | Frames | | Index map |
|-----------|------------|-------------|--------|---|-----------|
| | | | N | Frame nos. | |
| 6/3/1966 | GS-VRCA | 1 | 17 | odd nos. from 1-9, even nos. from 10-18, 19, even nos. from 20-28, 29 | none |
| 1/16/1967 | GS-VRCA | 1 | 16 | odd nos. from 1-11, even nos. from 12-30 | none |
| 6/2/1967 | GS-VRCA | 1 | 13 | even nos. from 2-14, 15, even nos. from 16-24 | none |

| Table A3-1: Historical aerial photographs of the Rockville-Laurel area, Montgomery County, Maryland, 1966-1974 | | | | | |
|---|---------|--------------|---------------|--|--------------------|
| | | | Frames | | |
| 12/8/1967 | GS-VRCA | 1 | 16 | odd nos. from 1-9, 10, odd nos. from 11-19, even nos. from 20-28 | none |
| 6/18/1968 | GS-VRCA | 1 | 16 | 4-8, 10, 11, 18, 20-24, odd nos. from 31-35 | none |
| 12/6/1968 | GS-VRCA | 1 | 15 | 2, 4-7, 12-17, 25-28 | none |
| 6/30/1969 | GS-VRCA | 1 | 15 | 4-8, even nos. from 10-14, 15, 16, 18, odd nos. from 23-29 | none |
| 6/13/1970 | GS-VRCA | 1 | 13 | 2, 4, 5, 7, 10-13, 16-18, 20, 21 | none |
| 5/3/1971* | GS-VRCA | 1 | 14 | odd nos. from 1-7, even nos. from 8-16, odd nos. from 17-23, 24 | none |
| 7/26/1972 | GS-VRCA | 1 | 13 | 3-5, 7, 13-17, 23-25, 28 | none |
| 6/14/1973 | GS-VRCA | 1 | 15 | 3-7, 12-16, 20-24 | none |
| 7/2/1974 | GS-VRCA | 1 | 13 | 3, 5, 6, 7, 11-13, 15, 19-21, 23, 25 | 8.5"x11" index map |
| | | TOTAL | 176 | | |

* Two sets of photos were flown on 5/3/1971, each with the same 14 frame numbers. "Bad Scale" is handwritten on the back of the last photo (Frame GS-VRCA-1-24) in one set of photos. For all of the photos in the other set, the embedded flight date is struck through, and the date "7-3-71" is handwritten in red, with the notation "Scale Adjusted" on the first photo (Frame GS-VRCA-1-1) in the set. Besides the changed date notations, the photos in the second set appear to be rotated 180° with respect to their counterparts in the first set, based on the edge along which the embedded flight information appears. The authors assume that all of the photos in the first set suffer from scale problems and recommend that only the photos in the second, date-annotated set be scanned.

COLLECTION LOCATION AND STORAGE CONDITIONS

The Montgomery County aerial photos are located in the Survey library (Room 315), a room subject to temperature extremes – hot in summer and cold in winter. They are stored in an open wooden box, about 21” in length, 17” in depth, and 10” in width, stood on its smallest side. The box is divided with vertical partitions into ten, 3/4”-wide sections. Air photos, in groups of about 20, are stacked, clipped together with a binder clip, and stored vertically in the wooden box, roughly in order by date. The box has no lid, and the top few inches of the photos extend beyond the upper edge of the box. The box is near a north-facing window, and the top edge of the first photo in a stack is exposed to sunlight. A band of light brown discoloration, about 0.5” wide, is evident on the backs of many of the photos, along the top edge. The backs of a few photos are splotched or streaked with a light greenish-brown stain, possibly mildew. Vertical storage has caused some of the photos to buckle slightly under their own weight (i.e., a photo, viewed side-edge-on, is likely to appear wavy). Furthermore, the bottom corners of the first and last photos in a stack have a tendency to bend as the stack is replaced in its slot, catching the top of the vertical partition as the stack descends. Even so, the photographs are generally in good condition, except for bent corners and minor to moderate wear along the edges. A few are torn, but most of the tears are no more than 1” in length. Finally, some of the photos are lightly marked, with particular areas outlined and/or identified as to land use/land cover.

COLLECTION DOCUMENTATION

The Survey’s Internal Data Preservation Database

Several years ago, MGS developed and began populating a Microsoft Access database, AirPhotoIndex.mdb, with information about its collection of 9”x 9” aerial photographs and associated index maps. The database, stored on the MGS network (Common on ‘Mgsdc’:/AirPhotoIndex), contains two primary tables, tblAirPhoto and tblIndexMap, with information about air photos and index maps, respectively. MGS copied tblAirPhoto, structure only, to the Data Preservation Database, renamed the table tbl_AerialPhotos_MontCo_1966-1974, and populated it with information about the Montgomery County aerial photographs. MGS subsequently added NNGDPP metadata fields to the table and populated those, in part by concatenating entries in other fields. A modification of that table, tblUploadMetadata_AP_MontCo_201210, containing only the NNGDPP metadata fields, was submitted to the USGS for incorporation into the *ScienceBase Catalog*.

The USGS ScienceBase Catalog

For aerial photos in this special collection, the project area-film negative roll-frame number embedded along the top of each photograph does NOT provide a unique identifier. For example, in the entire collection of 176 photos, four are labeled “GS-VRCA-1-8,” each flown on a different date. To create a unique NNGDPP *title* field, MGS concatenated the identifier with the date of photography in YYYYMMDD format. So, for example, the *title* of the first of the four photos labeled “GS-VRCA-1-8” is “GS-VRCA-1-8_19670602.”

In most cases, MGS assigned the *geographic coordinates* of the centroid of Montgomery County to each photo. For photos flown on Jan. 16, 1967, labeled with the name of the major town or community visible in each one, MGS assigned the geographic coordinates of that town or community. In all instances, coordinates were obtained from the GNIS website.

For additional information about the Survey’s handling of collection-specific metadata, see the associated *NGGDPP Metadata Form* below.

PAPER-TO-DIGITAL CONVERSION

None of the aerial photographs in this collection has been scanned; neither has the associated index map.

ACCESSIBILITY

Until their transfer to the Maryland State Archives, the physical photographs are accessible to the public at MGS, for in-house only, during normal business hours, through prior arrangements with the Survey’s curator.

SUMMARY OF ACTIONS

| Date | Action |
|---------------|---|
| Sept-Oct 2012 | Entered information about individual photos in DataPreservation.mdb |
| 10/1/2012 | Collection inventory submitted to <i>ScienceBase Catalog</i> ; ScienceBase ID generated for collection |
| 10/24/2012 | Submitted metadata for all 176 aerial photographs to NGGDPP as .csv file to upload to <i>ScienceBase Catalog</i> ; amended collection description in <i>ScienceBase Catalog</i> |

NEXT STEPS

- A subcommittee of the Maryland State Geographic Information Committee (MSGIC) has been reconvened to preserve historical aerial photographs and make digital images of them available through the Maryland State Archives’ (MSA’s) website. Once the imagery is scanned, web-accessible and easily searchable/downloadable, MGS intends to donate the original photographs and index map to MSA for permanent preservation. Visitors to the MGS website will be able to link to the digital images available through the MSA website.
- Incorporate the information pertaining to these aerial photographs, stored in the Data Preservation database, into the Air Photo Index database. Create a field in the Air Photo Index database that allows for easy identification of these air photos as a particular special collection. Change the *alternateTitle* field in NGGDPP metadata to reflect the *AirPhotoID* in that database and update *ScienceBase*.

- Consider providing Montgomery County GIS (Apollo Teng - apollo.teng@montgomerycountymd.gov) – with images of the photos once they are scanned

NGGDPP METADATA FORM

Historical Aerial Photographs of the Rockville-Laurel Area, Montgomery County, Maryland, 1966-1974

MGS Collection ID: 36
Original NGGDPP ID: n/a
ScienceBase ID: 5069f121e4b046e0dfdbbc73

November 2013

Sources of Information:

- Information embedded, stamped and/or handwritten on the aerial photographs or associated index map and stored in the internal MGS Microsoft Access database DataPreservation.mdb
- USGS *ScienceBase Catalog* (collection ID)
- 2006 *Implementation Plan for the National Geological and Geophysical Data Preservation Program*, Appendix 2 (data type)
[<http://datapreservation.usgs.gov/docs/2006DataPreservation.pdf>]
- USGS Geographic Names Information System (GNIS) website
[<http://geonames.usgs.gov/domestic/>] (geographic coordinates for towns, etc. in Montgomery Co.)

CollectionID

Definition: NGGDPP collection identification number

Value: “5069f121e4b046e0dfdbbc73”

Originally generated by the *ScienceBase Catalog* upon submittal of a “collection inventory” for *Historical Aerial Photographs of the Rockville-Laurel Area, Montgomery County, Maryland, 1966-1974*; stored internally in DataPreservation.mdb – tblCollection – field *ScienceBaseID*

Source: DataPreservation.mdb – tblCollection – field *ScienceBaseID*

Title

Definition: Official, human-readable title for individual record, used in listings & search results (short, distinctive) – mandatory

Value: A concatenation of three elements representing the flight/project code, the frame number, and the date of photography (YYYYMMDD format). The first two elements are separated by dashes; the year is separated from the photo identifier by an underscore

Source: Embedded along upper (“north”) edge of aerial photograph; elements comprising the title are stored as three separate fields in the Data Preservation database – tblAerialPhotos_MontCo_1966-1974 – fields *Flight Line*, *Frame*, and *date*.

Example:

- GS-VRCA-1-19_19660603 (*Flight Line* = GS-VRCA-1; *Frame* = 19; *date* = 19660603; on the photo itself, “6-3-66” appears at the upper left corner, “1-19” appears along on the north-central edge and “GS-VRCA,” at the upper right corner)

Alternate Title

Definition: Additional title identifiers for individual record (e.g., for further identification by other Web service interfaces); textual titles or specific sample IDs used by collection – optional

Value: “Montgomery Co. Spec. Coll. Air Photo ID = “& [AirPhotoID]”

Source: Data Preservation database – tblAerialPhotos_MontCo_1966-1974 – field *AirPhotoID*

NOTE: Eventually, the information in this table will be added to the Air Photo Index database, at which point the *alternateTitle* should be changed to reflect the *AirPhotoID* in that database.

Abstract

Definition: Human-readable description of individual record, used to help determine nature of underlying physical data resource; contains much information about data resource – mandatory

Value: General information about photo, including date of flight found embedded or stamped on front of photo:

“Black-and-white aerial photograph, 20 in. x 20 in. in size, flown over Montgomery County, MD on [date of photography]; paper only”

Source: the photo itself

Data Type

Definition: A controlled vocabulary of one or more data types - mandatory

Value: “Photograph”

Source: Determined by MGS, based on the list of data types provided in Appendix 2 of the 2006 NGGDPP *Implementation Plan*

SupplementalInformation

Definition: Information on how to access physical data represented by metadata record (e.g., general for entire collection, such as URL, or specific reference to online resource, like ordering system with specific ID) - mandatory

Value: “Contact the MGS curator at (410) 554-5500 for additional information.”

Source: n/a

Coordinates

Definition: Geographic coordinates (longitude, latitude), in decimal degrees – mandatory

Value: (-)decimal longitude, decimal latitude

Source: U.S. Geological Survey’s Geographic Names Information System (GNIS)

In general, MGS assigned the coordinates of the county centroid of Montgomery County, Maryland, unless a label affixed to the photograph identified a site-specific location. For the latter, MGS assigned the geographic coordinates of the corresponding “populated place” or “locale,” as reported by GNIS. The pairs of coordinates for the photographs are reported in Table A3-2.

| Table A3-2: Geographic coordinates (NAD83) of (a) “populated places” or (“locales”) in Montgomery County, Maryland, or (b) the Montgomery County centroid (feature class = “civil”), from the Geographic Names Information System (GNIS), September 2012 or January 2011, respectively | | | | |
|---|-----------------------|------------------------|-----------------------------|------------------------------|
| County | Latitude (DMS) | Longitude (DMS) | Latitude (dec. deg.) | Longitude (dec. deg.) |
| Aspen Hill | 390446N | 0770423W | 39.0795529 | -77.0730338 |
| Avery | 390634N | 0770718W | 39.1095523 | -77.1216461 |
| Brooke Manor (Country Club) | 390727N | 0770436W | 39.1242744 | -77.0766453 |
| Browns Corner (3 different sites by that name) | | | | |
| Colesville | 390432N | 0770007W | 39.0756643 | -77.0019212 |
| Fairland | 390434N | 0765728W | 39.0762198 | -76.9577534 |
| Glenmont | 390328N | 0770259W | 39.0578867 | -77.0496999 |
| Goshen | 391212N | 0771115W | 39.2034396 | -77.1874820 |
| Layhill (used Norwood coordinates for “Norwood-Layhill”) | 390532N | 0770240W | 39.0923305 | -77.0444222 |
| Norwood (Sandy Spring quad) | 390731N | 0770139W | 39.1253855 | -77.0274776 |
| Olney | 390911N | 0770401W | 39.1531628 | -77.0669230 |
| Redland | 390843N | 0770839W | 39.1453851 | -77.1441470 |
| Rolling Knolls | 391046N | 0770714W | 39.1795511 | -77.1205356 |
| Sandy Spring | 390858N | 0770137W | 39.1495517 | -77.0269221 |
| Springbrook (Beltsville quad) | 390313N | 0765941W | 39.0537202 | -76.9946987 |
| Washington Grove | 390823N | 0771031W | 39.1398296 | -77.1752588 |
| Montgomery County centroid | 390900N | 0771159W | 39.15 | -77.199722 |

AlternateGeometry

Definition: Alternate method of storing geospatial footprint; description of authoritative source of geographic location & how simple coordinates derived – optional

Value:

For Montgomery County centroid:

“Geographic coordinates (NAD83) represent centroid of Montgomery Co., MD, from the U.S. Geological Survey's Geographic Names Information System (GNIS).”

For specific place name:

“Geographic coordinates (NAD83) represent Springbrook, MD, as shown on the Beltsville quadrangle, from the U.S. Geological Survey's Geographic Names Information System (GNIS)”

Source: n/a

OnlineResource

Definition: URL pointer(s) to textual information about specific record - optional

Value: n/a

Source:

BrowseGraphic

Definition: URL pointer(s) to images representing specific record - optional

Value: n/a

Source:

Date

Definition: Meaningful date (e.g., collection date) attached to record; may be to any degree of precision or left blank (e.g., 20010101, 1939-1945, -20030331, 2000) - optional

Value: Date on which the aerial photo was flown

Source: Embedded in upper left corner of aerial photograph

Examples: Dates as they occur on the photos, 6-14-73, for example, are reformatted, as follows: 19730614

DatasetReferenceDate

Definition: Reference date indicating currency of underlying data record (e.g., date metadata record added to National Catalog); format=YYYYMMDD - mandatory

Value: Date record provided to NCGDPP for uploading to the *ScienceBase Catalog*, namely 20121024

Source: Provided by curator

VerticalExtent

Definition: Vertical extent (e.g., vertical depth information for rock core samples); contains 2-3 elements: unit of measure, max value, min value (e.g., m, 35.4, 0 => rock core measured at 35.4 total meters)

Value: n/a

Source: n/a

Additional Information about the Sources, Samples, Etc.

Only one index map, covering the photos flown on July 2, 1974, is associated with the collection. The information below is provided on the index map. However, it is unclear whether that information applies only to photos flown on July 2, 1974, or, more widely, to photos flown on other dates, as well.

“United States Department of the Interior
Geological Survey
Topographical Division
Project: GS-VRCA
State: Maryland
Photography completed: July 2, 1974
Flight height above mean ground level: 12,000’
Scale of photo index: 1:125,000
Camera Lens no.: Uag 1011 CFL 151.94 mm
Contractor: Air Photographics, Inc.
Quadrangle names: Rockville/Laurel”

NOTE: The bounding geographic coordinates (latitude, longitude) on the index map are:
NW corner: 39°15’ N, 77°15’ W
SE corner: 39° N, 76°50’ W

APPENDIX 4

Historical Photographs of Tidal Shorelines, Maryland, 1948-1977

MGS Collection ID: 23

Original NGGDPP ID: n/a

ScienceBase ID: 4f4e4a94e4b07f02db658da3

<https://www.sciencebase.gov/catalog/item/4f4e4a94e4b07f02db658da3>

November 2013

COLLECTION DESCRIPTION

Beginning as early as 1914, the Maryland Geological Survey (MGS) has periodically measured and mapped Maryland's tidal shorelines to determine shoreline length and quantify land loss due to erosion. One such effort in the mid-20th century produced a large, well-documented, well-organized collection of shoreline photographs. This collection consists of about 4,000 photographs, as many film negatives, and an estimated 12,000 slides of tidal shorelines in Maryland. The photographs, most black-and-white, were taken between 1948 and 1977 during periodic surveys of shore erosion at specific sites, or benchmarks, along the Chesapeake Bay, its major tributaries, and the Atlantic coast. The 12 coastal counties included in the surveys were: Anne Arundel, Baltimore, Calvert, Cecil, Charles, Dorchester, Kent, Queen Anne's, St. Mary's, Somerset, Talbot, and Worcester Counties.

The origin of the collection is based largely on inference and the imperfect memories of a few of the Survey's current employees. Former MGS geologists, including Chris Slaughter, Barry McMullen, and Randy Kerhin, established informal benchmarks at a number of sites along the shoreline in each of the 12 coastal counties, on average about a dozen sites per county. The surveyors then periodically revisited the same sites to measure the distance between the benchmark and the shoreline, taking photographs during each visit. The repeated measurements allowed them to calculate the amount of shoreline change over time. Although the number of visits per site varied, ten visits, more or less, is common, resulting in a visual time-series of shoreline change. A few sets of photographs, especially the earliest ones, appear to be associated with particular, site-specific projects, in which Survey geologists were invited to consult on erosion problems and/or solutions for individual property owners (e.g., the Koester and Meyerhoff properties in Anne Arundel Co.).

Most of the photographs were taken from ground level (beach or bluff) or, less commonly, from a boat offshore. There are also a few low-altitude, oblique-angle aerial photographs. Ground-level photographs were usually shot in either direction along the shoreline from the vicinity of the benchmark. In some instances, the photographs, when

overlapped, afford panoramic views of the shoreline. Photographs also document the benchmarks and/or their exact locations – cement cylinders buried in the sand, a surveyor holding a stadia rod, a feature along a developed shoreline (e.g., Baltimore Co. - BA-13, 7/30/69, B.M. #3), etc. – as well as newly constructed shoreline protection structures, failing structures, the strata exposed on an eroded bank face, agents responsible for erosion, etc.

There may have been other projects for which shoreline photographs were taken. For example, a great many envelopes with negatives for “NRI, S. Tilghman Island, Talbot County,” are dated in the 1960s and marked “Field Project,” leading the curator to believe that this was the site of a particular study, not necessarily part of the larger shore erosion study.

Although it is unlikely that quantitative shoreline change or bank height information can be gleaned from the photographs, they do illustrate the long-recognized problems of shore erosion in the Chesapeake Bay region, as well as the nature (e.g., beach, bank, marsh) and physical features of the shoreline and the vegetation, or lack thereof, along the shore. In some instances, the distance of a fixed feature or structure from the shoreline (e.g., a tree or its stump at the top of a bluff at Liverpool Pt., Charles Co.; a fence line near the cliff edge at Fairhaven, Anne Arundel Co.; a steel tower (B.M. #10) near the edge of a bluff in Kent Co.) can be seen to decrease over time, qualitatively providing evidence of erosion.

Certain photos document the processes causing or exacerbating erosion, including wave action, freeze-thaw activity, water pouring from a cliff face at the contact between a permeable and an impermeable stratigraphic layer (Randle Cliff, Calvert Co. – CAL-156). Because the photos for any given site were taken over a period of years at different seasons and/or tide levels, they sometimes show the varying effects of temperature and tide. The photographs also document the sometimes creative, sometimes obsolete methods used to combat erosion, failing in many instances. Some show the installation and long-term performance of specific shoreline protection techniques (e.g., the use of “Fabriform” along a particular, privately-owned property in Arcadia, Anne Arundel Co.); others, the aftereffects of failed structures (e.g., wooden bulkhead, Potomac View, Charles Co.). Some illustrate the sometimes short-lived “fix” offered by structural protection (e.g., wooden bulkhead, Ragged Is., Dorchester Co.). Others illustrate the before and after appearance of the shoreline - the sometimes radical modification of the shoreline prior to and following the installation of protective structures (e.g., Piney Neck, Bennett Pt., Queen Anne’s Co.)

The photographs may also be of historic interest. Some capture structures: lighthouses, such as those at Cove Point and Turkey Point; the amusement park structures of Bay Shore Park in Baltimore Co., eligible for inclusion in the Maryland Register of Historic Properties; and private residences (e.g., Drum Pt. and Kenwood Beach, Calvert Co.). Others show the remnants of eroding islands, a few of which, such as Poplar Island (Talbot Co.) and Hart and Miller Islands (Baltimore Co.), have since been incorporated into dredged material containment facilities. Still others illustrate land use prior to the

passage of Critical Area legislation, with tilling, for example, reaching to the very edge of eroding bluffs (e.g., Bennett Pt., Queen Anne’s Co.)

Collection Components

The collection consists of three related components: (1) film negatives, (2) film positives (photographs), and (3) slides. Film negatives are grouped by site and date of visit, “Site-Date” for short. All of the negatives shot at a particular site on a particular date are stored in a single envelope. For each envelope of film negatives, there is generally a corresponding envelope of photographs, with the same or very similar label. (There are exceptions – not every negative envelope has a corresponding photo envelope, and vice versa.) In many, if not most, instances, the film negative and/or photograph envelopes also reference a slide number or range of slide numbers, presumably related to the third component of the collection, the slides.

As of the date of this report, metadata for the site-date envelopes containing the first two collection components have been stored in the Survey’s internal Data Preservation Database and uploaded to the U.S. Geological Survey’s (USGS) *ScienceBase Catalog*. Because the information contained on the film negative envelopes is more or less identical to the labels on the associated photograph envelopes, each *ScienceBase* record represents a film negative-photograph envelope set. MGS has not yet documented the slides component of the collection.

Related Materials

Many of materials associated with this collection have been lost. Some, however, remain. In addition to the photographs, negatives, and slides, the following related items have been located:

- 3 denim-covered 3-ring binders, listing and identifying all of the slides, labeled (1) “Bench Marks, Slides & ‘Black & White Film,’” (2) “BLACK AND WHITE FILM INDEX,” and (3) “SLIDE-INDEX REFERENCE, CHRONOLOGICAL ORDER” and “Talks” (Location: Library - Room 315 – Bookshelf with red DNR inventory sticker 37782 – Shelf 2)
- A few (26) County-Site folders for Kent and St. Mary’s Counties only:
Kent Co. – Benchmarks #1, 2, 4, 5, 6, 7, 8, 9, 10, 12, 13 (missing #3, 11)
St. Mary’s Co. – Benchmarks #1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15
(Location: MGS Archives box labeled “Shoreline Photos Coll - #23”)

Originally, one County-Site folder existed for each site. Only a few such folders still exist, labeled with a county name, a benchmark number, and a site name. The other folders were discarded after the untimely death of Randy Kerhin, last official keeper of these records.

County-Site folders contain such items as: specific location of the site (a detailed written description with directions to the site, as well as a Xerox copy of a USGS topographic quadrangle with an “X” marking the site location); bank height and

slope; beach width; drift direction; distance between the benchmark and the shoreline.

A 3-ring binder containing an original report, along with original photos (and unsorted packets of negatives): Slaughter, T.H., and McMullan, B.G., 1975, Seasonal beach variations in the Maryland Chesapeake Bay. (Location: MGS Archives box labeled “Shoreline Photos Coll - #23”)

- Some sites are identified on the Survey’s *Historic Shorelines and Erosion Rates Maps* (Conkwright, 1977) (Jeff Halka, pers. comm., 1/9/2013). See, for example, the map for the Prince Frederick quad (Calvert Co.).
- ShorelineSections.pdf – the paper original of this file, dated 5/17/1995, was discovered in a folder labeled “Measured Sections” in one of Randy Kerhin’s file cabinets (1/3/2013). It contains bank heights and bank descriptions for a number of shoreline sites backed by bluffs, with benchmark numbers and site descriptions that correspond to those found on certain shoreline photo envelopes. (The digital version of the paper is stored in the directory associated with the collection; the original is in the MGS Archives box labeled “Shoreline Photos Coll - #23”)

Copies of correspondence between MGS and various waterfront communities or property owners addressing particular shore erosion concerns. Usually, the letter, a typed carbon copy on onion-skin paper, is accompanied by a *Shore Erosion Report* describing the findings of an on-site investigation. The *Shore Erosion Report* follows a template including some or all of the following: name and address of person or group requesting inspection; location of shore front; date of inspection; persons present during inspection; areas of concern, remarks, problem, field observations, composition of exposed bank, offshore depth profile, littoral drift, historical data, protection, predominant winds, tide range, and recommendations. Although the letters sometimes reference an enclosed map and/or photos, these are not included with the copies of correspondence. To date, the curator has located folders of such correspondence for ten Maryland counties (see Table A4-1), containing a total of 117 letters and/or reports (543 pages) written between 1948 and 1967.

Table A4-1: Correspondence and *Shore Erosion Reports* for particular waterfront communities and property owners, (1948-1967)

| County | Letters and/or Reports (N) | Range of dates, based on date of investigation or (date of correspondence) |
|-----------------------|-----------------------------------|---|
| Anne Arundel (Part I) | 32 | 1948 - 1964 |
| Baltimore | 3 | 1952 - (1958) |
| Calvert | 17 | 1948 - 1962 |
| Cecil | 8 | 1952 - 1959 |
| Dorchester | 9 | 1951 - 1967 |

| | | |
|--------------|-----|-------------|
| Kent | 5 | 1949 - 1965 |
| Queen Anne's | 8 | 1950 - 1967 |
| Somerset | 6 | 1948 - 1961 |
| St. Mary's | 18 | 1950 - 1964 |
| Talbot | 10 | 1951 - 1965 |
| TOTAL | 117 | 1948 - 1967 |

A table, *tblSLErosionReports*, in the *Data Preservation Database* serves as a finding aid for the letters and attached *Shore Erosion Reports*. The table includes the following fields: county ID; description of shoreline reach; investigation and correspondence dates; addressee and address; the existence or not of a *Shore Erosion Report*; number of pages; and additional comments.

The *Shore Erosion Report* folders themselves are in a box labeled “Shoreline Photos Coll - #23.” Ideally, they should be scanned and stored in the directory associated with the collection.

- Cuthbertson, R., 1988, Properties on tidewater requiring shore erosion protection: Baltimore, Md., Maryland Geological Survey, Coastal and Estuarine Geology Program File Report No. 59, 69 p. (includes color photographs, glued to pages, illustrating erosion at particular sites). (Location: MGS Archives box labeled “Shoreline Photos Coll - #23”)

Besides the known related materials, references to unknown materials appear on the envelope labels and in various reports:

- At least three additional reports similar to the one produced by Robert Cuthbertson in 1988. Cuthbertson's 1988 report indicates that it is the fourth in a series of reports “on state-owned properties on tidewater requiring shore erosion protection;” 1974, 1978, 1983 are the publication dates of the three previous reports, none of which is known to exist.
- A “scrapbook.” Some photo envelopes are labeled “See scrapbook.” However, the scrapbook has yet to be located, if, in fact, it still exists.

COLLECTION LOCATION AND STORAGE CONDITIONS

The three main components of the collection – film negatives, photographs, and slides – are currently stored in two different locations, under different storage conditions. The photographs and film negatives are stored in the MGS Archives. The room, on the ground floor of the Annex, is subject to the same temperature and humidity variations as other heated or air-conditioned rooms on the same floor – neither too hot in summer nor too cold in winter. No additional climate control apparatus (e.g., dehumidifier) is utilized. Window blinds are kept drawn at all times. To date, unwelcome water – rain or leaking water pipes – has never been a problem.

Slides are stored in the map library on the third floor of the main building. That space is subject to greater temperature variations than is the room housing the MGS Archives. In particular, the third floor is considerably warmer in summer. Although moving the slides to the MGS Archives is desirable, there is, at present, insufficient space there to accommodate them.

For the most part, items comprising the collection appear not to have been disturbed for several decades.

Film Negatives

Film negatives are located in the MSG Archives (Annex - Room 114), in the top (first) drawer of a file cabinet identified by a red DNR inventory sticker (#12060). The negatives are stored in 3"x5" brown Kraft paper envelopes, which are arranged in two long, parallel rows and grouped by county. Counties are separated from each other by labeled (tabbed) 3"x5" index cards. Within a county, envelopes are grouped alphabetically by site name and, within a particular site, in reverse chronological order (i.e., most recent date at front), though this filing scheme is not strictly followed. In documenting the collection, the curator preserved the original filing order, assigning film negative envelopes an identification number, written in pencil in the lower left corner, and consisting of a county abbreviation and envelope number (see Collection Documentation below). The only exceptions to maintaining original filing order were for envelopes that had been misfiled or mislabeled (e.g., envelope TA-68 – Denny Farm – B.M. #1 – was originally filed with Queen Anne's County envelopes). A few of the envelopes are empty.

The negative envelopes are fairly well organized and very well labeled. A typical label is shown below (Fig. A4-1):

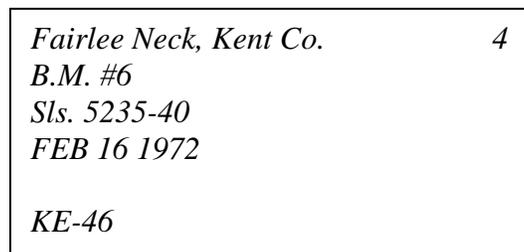


Figure A4-1: Typical label for negative envelope (or photo envelope)

Where:

- *Fairlee Neck, Kent Co.* are the names of the site and the county in which the site is located
- *4* is the number of film negative frames (or photographs) originally contained in the envelope (NOTE: This number usually, but not always, corresponds with the number of frames or photos actually in the envelope.)

- *B.M. #6* is the designated number of the benchmark within the county associated with the site. For each county, benchmark numbering begins anew with #1.
- *Sl. 5235-40*, presumably, are the slides associated with that site and date
- *FEB 16 1972* is the date on which the site was visited and photographed
- *KE-46* is an identification number assigned by the curator in documenting the collection (See Collection Documentation below).

The film negatives vary in size. Most are 35-mm; older ones are as large as 1.5"x1.5", ~1.5"x2", or envelope-sized. At least two types of 35-mm-sized film are represented in the collection: (a) Kodak Safety Film, with 1 sprocket per frame (bottom only) and 1 frame number and (b) Kodak Plus X Pan, with multiple sprockets at the top and bottom of the frame and, usually, two numbers per frame (e.g., 3, 3A). Some of the film negative strips appear to have been cut apart, perhaps so that they would fit in the envelopes.

Most of the film negatives are in good condition; a few are torn or cracked. On some (<10%), the film emulsion seems to have darkened over time and, on others, faded.

Photographs

Like the film negatives, photographs are located in the MSG Archives (Annex - Room 114) in the second drawer of the same file cabinet, identified by a red DNR inventory sticker (#12060). The photographs are stored in 4.25"x5.25" brown Kraft paper envelopes, which are arranged in two parallel rows and grouped by county. Counties are separated from each other by labeled (tabbed) 3"x5" index cards. Within a county, photo envelopes were originally grouped, first by benchmark number and, then, in chronological order by date of visit (i.e., most recent date at back). However, the envelopes have been rearranged to coincide with the order in which the negative envelopes were/are filed. The same number assigned the negative envelope has been written in pencil in the lower left corner of the corresponding photo envelope. Photo envelopes are now arranged in order by that identification number.

In general, for each envelope of negatives, there is a corresponding envelope of positives (photos). However, that is not universally the case. There are some envelopes of photos for which no corresponding envelope of negatives has been found. Also, sometimes, there is a negative envelope full of negatives; the corresponding photos have been split into a number of envelopes (e.g., Baltimore Co. – BA-5 – 1/3/1972). For some sets of negatives and positives, the envelopes are labeled identically, but are empty. These may be place holders to describe the location of the slides listed on the label (e.g., Sunny Isle of Kent, Queen Anne's Co.) or at least an indication that the site was visited on that date.

Like the negative envelopes, the photo envelopes are very well labeled, with the same kinds of information found on the negative envelopes (Fig. 4-1). Generally, the same information is also recorded in ink on the back of each photo in a particular envelope. (Note, however, that if changes have been made to the information on the photo envelope, they have not necessarily been made on the photos inside the envelope.)

In general, the photographs are in good to excellent condition. In a few instances, ink from a label written on the back of a photo is beginning to bleed through to the front.

Slides

Slides are located in the Map Library (Main building – Room 315) on the second, third, and fourth shelves of a bookcase identified by a red DNR inventory sticker (#37782). They are stored in 42 gray metal, 35-mm slide storage boxes designed to hold 300 slides each (150 slots, 2 slides per slot). The storage boxes are numbered sequentially, beginning with 1: “Shore Erosion #1 – 1-300,” “Shore Erosion #2 – 301-600,”...”Shore Erosion 41 – 11,996-12,494,” “Box 43.” (Box 42 is missing.)

From a cursory examination of slide box contents, slides are stored sequentially beginning with an assigned slide identification number of #1. The front of each slide is labeled with the handwritten identification number, site description (e.g., Little Cove Pt.), county abbreviation, and water body at the top of the slide, and the stamped date and “Maryland Geological Survey” at the bottom.

In addition to the slide storage boxes, the three denim-covered 3-ring binders, finding aids for the slide component of the collection (See Related Materials), are stored alongside the boxes on the second shelf of the bookcase.

Although the room in which the slides are stored is subject to relatively warm temperatures during the summer and, therefore, relatively wide swings in temperature, the slide storage boxes do serve to protect the slides from light and dust.

COLLECTION DOCUMENTATION

Steps in Documenting the Collection

MGS followed these steps in documenting the collection:

- Label each of the film negative envelopes with an envelope identification number consisting of a county abbreviation and consecutive number (e.g., AA-1, AA-2, etc.), preserving the order in which the film negative envelopes were discovered.
- Enter information about each film negative envelope into the table *tblSLPhotos* in the internal Data Preservation Database (see section MGS Data Preservation Database, below).
- Match the photo envelopes with the film negative envelopes, record the matching envelope identification number on the photo envelope, and amend the information for that envelope ID in the table *tblSLPhotos* to include information found only on or in the photo envelopes. Refile the photo envelopes in envelope ID order.

Usually the information included on labels was identical on both film negative and photo envelopes. With identical benchmark numbers, dates, associated slide numbers, and numbers of photos or negatives in an envelope, one could be reasonably sure that the match was correct. For photos that included a frame

number as an identifying label, usually in the bottom right corner on the front of the photo, a match could be more definitively confirmed. The ultimate test was that there be no two photo envelopes assigned the same label, except in rare cases where tens of film negatives, covering multiple benchmarks, were stored in one envelope and the associated photos were divided among many envelopes. Then, photo envelopes were identified as CO-#(a), CO-#(b), CO-#(c), etc. So, for example, for the single Baltimore County film negative envelope BA-5, containing 44 film negative frames, there were 11 photo envelopes, labeled BA-5(a) through BA-5(k).

- Search GNIS and, secondarily, other sources to find the geographic coordinates associated with each locality; store the coordinates in the internal database table *tblGNISLocality*.
- Create the requisite NGGDPP metadata fields by adding those field names to the table *tblSLPhotos* and populating them, in part, by concatenating information found in certain non-NGGDPP metadata fields in the same table.
- Amend the general information about the collection itself found in the *ScienceBase Catalog* and upload metadata extracted from the internal database to the catalog.

MGS Data Preservation Database

Shoreline Photos Table

Based largely on the information included on the labels of the film negative and photo envelopes (Fig. 1), MGS created a table, *tblSLPhotos*, in the internal Microsoft Access *Data Preservation Database* (DataPreservation.mdb). Each row in the table contains information about a matching pair of film negative and photo envelopes, except in the rare instances when only a negative or a photo envelope exists for a particular Site-Date. The table consists of the following fields:

- **SLPhotoEnvelopeID** (key field; Long Integer – AutoNumber format): an envelope identification number, assigned automatically by Access
- **OriginalID** (10-character Text format): the envelope identifier assigned by the curator to the negative and positive envelopes as part of documenting the collection. Except for a few envelopes found misfiled under the wrong county, the original IDs preserve the order in which the film negative envelopes were last filed.

The original ID consists of a 2- or 3-character string of letters, a dash, and a 3-character string of numbers (e.g., AA-001, CAL-033, KE-101). The two or three letters at the start of the ID are an abbreviation of the county name (**AA** – Anne Arundel Co.; **BA** – Baltimore Co.; **CAL** – Calvert Co.; **CE** – Cecil Co.; **CH** – Charles Co.; **DO** – Dorchester Co.; **KE** – Kent Co.; **QA** – Queen Anne’s Co.; **SO** – Somerset Co.; **SM** – St. Mary’s Co.; **TA** – Talbot Co.; **WO** – Worcester Co.). The number at the end of the ID indicates the file order of the envelope within a

particular county, beginning with 001 for each county. (Note: the envelope ID recorded on the envelope itself does NOT contain leading zeros; leading zeros were added in the database to allow digital sorting of envelopes in the order in which they are physically arranged.)

- **EnvelopeLabel** (Memo format): the information recorded on the outside of a film negative and/or photo envelope. Usually, the film negative and associated photo envelopes have identical labels. If, however, one contains more information than the other, the additional information is included in this field. A note following the label information indicates whether or not the two labels are the same and, if not, how they differ. If the only differences in the two labels are minor (e.g., “Co.” vs. “County,” “JUN 4 1974 vs. “JUN 04 1974”), then a “~” appears at the start of the note (i.e., “~same label for both negative and positive – photo – envelopes”).

Most of the film/photos are black and white, shot at ground level. But, if an envelope contains color or aerial film or photos, its label generally includes that information.

- **EnvelopeContents** (Memo format): this field includes three types of information – the contents of the negative envelope, the contents of the photo envelope, and a general description of the scenes/views depicted in the photos

Under the heading “Negatives,” the following information was recorded: the number (and type, if known) of film negative strips found in the envelope, including the number of frames and identifying frame numbers found on each (e.g., “1 35-mm film negative strip with 3 frames (9, 10, 11)”). 35-mm film negatives were identified by their size and by the sprocket holes along two opposite sides of the negative.

Under the heading “Positives,” the following information was recorded: the number and size of photos in the envelope, along with occasional film-negative frame numbers most commonly written in the lower right corner on the front of the photo (e.g., “3 3.5"x3.5" photos labeled 10-12 in lower right corner”).

A general description of the views captured by the photography was based on a brief examination of the photographs.

- **EnvelopeDate** (Date/Time – Short Date format): the date of the site visit, recorded on the envelope, as MM/DD/YYYY
- **CountyID** (Number – Long Integer format): the county identification number, linking table tblSLPhotos to table tblCounty (**2** – Anne Arundel Co.; **3** – Baltimore Co.; **4** – Calvert Co.; **7** – Cecil Co.; **8** – Charles Co.; **9** – Dorchester Co.; **14** – Kent Co.; **17** – Queen Anne’s Co.; **19** – Somerset Co.; **18** – St. Mary’s Co.; **20** – Talbot Co.; **23** – Worcester Co.).

- **CountyBMNo** (15-character Text format): County benchmark number assigned to the site location (e.g., #1). Note that benchmarks are not unique; each county begins anew with BM #1.
- **SiteLocation** (100-character Text format): a description of the location at which photos were taken (e.g., Maryland Point). All envelopes containing negatives and/or photos taken at the same site are assigned the same SiteLocation. To the extent possible, SiteLocation is identical to a Feature Name derived from the Geographic Names Information System (GNIS). Although location names are commonly abbreviated on envelope labels, often in different ways (e.g., Md. Pt. or Maryland Pt.), location names stored in the database are NOT abbreviated (e.g., Maryland Point).
- **PhysicalLocation** (Memo format): physical location of the negative and photo envelopes within the MGS building
- **FilmNegativeEnvelope** (Yes/No format): checked (Yes) if there is a negative envelope associated with particular site and date
- **PhotoEnvelope** (Yes/No format): checked (Yes) if there is a photo envelope associated with particular site and date
- **N_Negatives** (Number – Integer format): number of negatives in negative envelope
- **N_Photos** (Number – Integer format): number of photos in photo envelope
- **N_Slides** (Number – Integer format): number of slides, as recorded on envelope
- **Comments** (Memo format): additional comments
- The remaining columns in the table coincide with the 13 NGGDPP metadata fields. The contents of some of these are created by concatenating the information found in the non-NGGDPP-metadata fields.

Geographic Coordinates (GNIS) Table

Only place names, not geographic coordinates, were recorded on the envelopes. So, it was necessary to search the USGS Geographic Names Information System (GNIS) to find the latitude and longitude of each of the 134 sites. MGS created another table in the database, *tblGNISLocality* to store the site coordinates. The table consists of the following fields:

- **LocalityID** (key field; Long Integer – AutoNumber format): a locality identification number, assigned automatically by Access
- **LocalityName** (75-character Text format): the official GNIS name of the locality (e.g., Taylors Island)

- **LocalityType** (50-character Text format): the official GNIS locality type (e.g., populated place, cape, bay, etc.)
- **GNISLocalityID** (50-character Text format): official GNIS locality identification number (e.g., 588816 – for Taylors Island)
- **CountyID** (Number – Long Integer format): the county identification number, linking table tblGNISLocality to table tblCounty (**2** – Anne Arundel Co.; **3** – Baltimore Co.; **4** – Calvert Co.; **7** – Cecil Co.; **8** – Charles Co.; **9** – Dorchester Co.; **14** – Kent Co.; **17** – Queen Anne’s Co.; **19** – Somerset Co.; **18** – St. Mary’s Co.; **20** – Talbot Co.; **23** – Worcester Co.).
- **QuadID** (Number – Long Integer format): the 7.5-minute topographic quadrangle identification number, linking table tblGNISLocality to table tblQuad.

If a particular site appears on more than one quad and has, therefore, more than one set of geographic coordinates (e.g., Todds Point, Dorchester County, is located on both the Church Creek and Dorchester quadrangles), the quadrangle containing coordinates of the point nearest the shoreline was selected, in this case, the Oxford quadrangle.

- **CollectionID** (Number – Long Integer): the MGS collection identification number (i.e., 23) for which the locality information was sought, linking tblGNISLocality to tblCollection
- **LocalityDescription** (Memo format): Qualitative description of locality (e.g., MD side of Potomac River, upstream of mouth of Nanjemoy Creek), determined from an examination of the maps and orthophotography depicting the site, accessible from the GNIS website
- **Latitude (DMS)** (10-character Text format): Latitude of the locality in degrees-minutes-seconds (DDMMSS) (e.g., 382727N)
- **Longitude (DMS)** (10-character Text format): Longitude of the locality in degrees-minutes-seconds (DDMMSS) (e.g., 0761801W)
- **Latitude (DD)** (Number - Double format): Latitude of the locality in decimal degrees (DD) (e.g., 38.4576222)
- **Longitude (DD)** (Number - Double format): Longitude of the locality in (-) decimal degrees (DD) (e.g., -76.3002242)
- **DateAdded** (Date/Time – Short Date format): the date on which locality information was extracted from GNIS and added to the table, as MM/DD/YYYY

- **Comments** (Memo format): additional comments (e.g., from other information associated with the collection for which locality information was sought)

CHALLENGES, SOLUTIONS, AND LESSONS LEARNED

- Sometimes, if there were discrepancies between the number of photos found in a photo envelope vs. the number recorded on the envelope or the number of “matching” film negative frames, it was possible to resolve the matter by comparing, not just the contents of the label on the back of the photo, but also the handwriting itself.
- As is the case with so many of the Survey’s collections, place names are, with a few exceptions, the sole recorded form of positional information available. Geographic coordinates, a required NCGDPP metadata field, must be derived from other sources, based on those place names. Fortunately, most of the place names could be linked to geographic coordinates stored in GNIS. The derived coordinates are more or less accurate, depending largely on GNIS feature type. For example, because “capes” are point features that lie along the shoreline, coordinates for this feature type are fairly accurate, except insofar as shoreline position has changed over time. Usually lying either inland or offshore of the shoreline, coordinates for “populated places,” “locales,” and “bays,” are generally less accurate in terms of identifying the point along shore from which photos were taken.

Some of the benchmark descriptions refer to property owners (e.g., Wilson farm) and are not found in the GNIS database. For those, other envelopes in the same set (i.e., with identical benchmark numbers) sometimes provide additional information (e.g., S of Rock Hall). In those instances, the assigned geographic coordinates are for Rock Hall, which is in the GNIS database.

In the past, the Survey has usually recorded place names and associated geographic coordinates retrieved from GNIS as a table in a word document. This year, instead, MGS created a digital *tblGNISLocality* table in its internal database, to facilitate supplying the same coordinate information to other items in other collections.

COLLECTION-RELATED ACTIVITIES AND NEXT STEPS

Table A4-2 summarizes the main activities undertaken to date with regard to this collection.

| Table A4-2: Main activities taken with regard to the collection: <i>Historical (1948-1977) Photographs of Tidal Shorelines, Maryland</i> | |
|---|-----------------|
| Date | Activity |

| | |
|--------------------|---|
| 6/2/2009 | Initial inventory of collection: <i>Photographs, Chesapeake Bay Shoreline, Maryland</i> |
| Winter-Spring 2013 | Labeled negative and photograph envelopes with identification numbers. Created a table, <i>tblSLPhotos</i> , in Data Preservation database, based on negative and photograph envelopes; populated database with information found on envelope labels, supplemented with information on backs of photographs. In the same database, created another table, <i>tblGNISLocality</i> , with geographic coordinates of sites at which photos were taken. |
| 9/18/2013 | Submitted metadata to <i>ScienceBase Catalog</i> for 1,287 paired envelopes of shoreline photos and film negatives; 1 envelope in internal database excluded from <i>ScienceBase</i> because it lacked a date |
| 11/30/2013 | Submitted this report to USGS |

NEXT STEPS

Although the Survey made considerable progress in creating metadata for this collection, much more work is needed, particularly regarding the slide component of the collection:

- Confirm that the right negative is in the right envelope. The curator handled the negative and photo envelopes separately and did not systematically check to see that the two always corresponded in terms of their content. In several cases, the two – negatives and photos – clearly did not match (e.g., CAL-105). Where photos are labeled with film negative frame numbers, one can be fairly sure of a correct match, but frame labels, more often than not, are not written on the photos. To be absolutely certain that the contents of the two envelopes match, look at negative and photo envelopes together, using a light table, for instance, to make out details in the film negatives. Also, checking the following might be helpful: (a) the numbers of film negatives or photos originally stored in the envelope – they should usually be the same for both envelopes, (b) the labels on the backs of the photographs, and (c) the quality/content of the photographs.
- For the few sites (benchmarks) with associated County-Site folders, update the Data Preservation database by assigning geographic coordinates based on exact locations, as opposed GNIS feature locations.
- Several of the film negative envelopes are empty (e.g., 6/13/1973 – Chas. Co.). However, there are five packets of envelopes containing unsorted negatives in the Slaughter and McMullan report for five localities in Chesapeake Bay (Bay City and Sunny Isle of Kent, Queen Anne’s Co.; Far Cry Farm and Point Lookout (N and S of), St. Mary’s Co. Consider going through these “report” negatives and try to refile them in the appropriate site-date envelopes.
- Go through each photo envelope and, for photos without identifying information on the back, label them with the same information found on the envelope. This

will ensure that they make their way back into the right envelope if they are removed.

- Consider storing film negatives and photographs in different envelopes. Are the items at risk of deterioration due to the composition of the envelopes? At a minimum, be aware that neither the film negative nor the photo envelopes are sealed. Unless they are removed carefully from the drawer, their contents may spill and possibly be replaced in the wrong envelope. Consulting the database to find the photo size or the size and type of film negative strips and included frame numbers might help in correct refiling if a mishap occurs.
- Scan the photos and create a website of the collection; scan the related items; write a report based on the photos.
- Create metadata for the slide component of the collection. In the process, try to correlate the film negatives/photographs with the slides, based on the slide ranges recorded on the negative/photo envelopes.
- As with all MGS collections, the objects are subject to removal/disposal by someone unfamiliar with the collection. At minimum, relabel shelves and drawers so that it is clear the items are part of Collection #23.
- Create a bibliography of all MGS publications – reports and maps – having to do with shore erosion in Maryland, including Bulletin 6, the Historical Shoreline and Erosion Rates atlas, the Shoreline Changes atlas, associated reports, etc. Expand the opening paragraph in Collection Description section of this report to include a general description of what has gone on at MGS since erosion studies first began.
- Continue adding the bank heights and bank descriptions included in the Related Materials file *ShorelineSections.pdf* to the *Data Preservation Database* (i.e., in the *Comments* field in the *tblGNISLocality* table)
- Scan the contents of the *Shore Erosion Report* folders (see Related Materials) and store them in the *MGS Digital Library* directory associated with the collection.
- This set of photographs would make an interesting exhibit, particularly if someone returned to the same sites in the 21st century and took comparison photos.

APPENDIX A4-1

**Shoreline Film Negative and Photo Envelopes for
Anne Arundel County, Grouped by Site (Benchmark Number)**

SUMMARY:

| | |
|----------------------------------|-------------------------------|
| Number of negative envelopes: 75 | Number of film negatives: 312 |
| Number of photo envelopes: 87 | Number of photographs: 449 |
| Number of slides: | |

NOTE: A √ in the B.M. # column or in the Location column indicates, respectively, that the B.M. # or the location was included in the label of either or both the film negative and the photograph envelopes.

--- indicates that no relevant information appeared on either envelope

| Table A4-1: Shoreline film negative and photo envelopes for Anne Arundel County, Maryland | | | | |
|--|----------------------------------|----------------------------|------------------------|--------------------|
| Benchmark # | Location | Date of photography | Range of slides | Envelope ID |
| Anne Arundel Co. Miscellaneous | | | | |
| --- | Annapolis Roads | June 30, 1969 | 1933-1942 | AA-87 |
| --- | Cedarhurst; Ches. Bay | Jan. 10, 1973 | 6593-6597 | AA-17 |
| --- | Mill Creek; Lapidés | Dec. 10, 1973 | 8407-8412 | AA-41 |
| --- | Wagner Power Plant; Patapsco R. | May 22, 1974 | --- | AA-75 |
| --- | Main Cr. | May 28, 1974 | --- | AA-40 |
| --- | Stony Cr. | May 28, 1974 | --- | AA-55 |
| --- | Severn R.; near mouth at bay | July 1974 | --- | AA-51 |
| Anne Arundel Co. B.M. #1 (I) | | | | |
| Fairhaven Cliffs (Fairhaven Cliffs (cliff) – North Beach quad) | | | | |
| --- | √; Fairhaven Cliffs; Herring Bay | Oct. 2, 1970 | --- | AA-28 |
| √ | √; Fairhaven Cliffs; Ches. Bay | Nov. 25, 1970 | 3925-3927 | AA-34 |
| √ | √; Fairhaven | Jan. 21, 1971 | 3225 | AA-33 |

| | | | | |
|--|-----------------------------|----------------|-----------|-------|
| | Cliffs | | | |
| √ | √; Windy Cliffs | Apr. 23, 1971 | --- | AA-32 |
| √ | √; Fairhaven Cliffs | Aug. 5, 1971 | 4435-4436 | AA-31 |
| √ | √; Fairhaven Cliffs | Nov. 9, 1971 | --- | AA-30 |
| √ | √; Fairhaven Cliffs | Feb. 9, 1972 | 5189-5190 | AA-29 |
| √ | √; Fairhaven Cliffs | July 25, 1972 | 5788-5789 | AA-27 |
| √ | √; Fairhaven Cliff | Jan. 10, 1973 | 6589-6590 | AA-26 |
| √ | √ | June 6, 1973 | 7283-7284 | AA-25 |
| √; I | √; Fairhaven Cliffs | July 25, 1974 | --- | AA-24 |
| Anne Arundel Co. B.M. #2 Cheston Point (Cheston Point (cape) – Deale quad) | | | | |
| √ | √ | Dec. 10, 1970 | 3122-3126 | AA-23 |
| √ | √ | Jan. 21, 1971 | 3226-3229 | AA-22 |
| √ | √ | May 11, 1971 | --- | AA-21 |
| √ | √ | Aug. 5, 1971 | 4427-4434 | AA-20 |
| √ | √ | Feb. 9, 1972 | 5184-5188 | AA-19 |
| √ | √ | July 25, 1972 | 5790-5793 | AA-18 |
| Anne Arundel Co. B.M. #3 Fort Smallwood (Fort Smallwood Park (park) – Sparrows Point quad) | | | | |
| --- | √ | May 29, 1952 | --- | AA-37 |
| --- | √ | Feb. 8, 1953 | --- | AA-36 |
| √ | √; Fort Smallwood City Park | Nov. 5, 1971 | --- | AA-39 |
| √ | √ | Feb. 14, 1972 | 5207-5208 | AA-38 |
| √ | √ | Aug. 2, 1974 | --- | AA-35 |
| Anne Arundel Co. B.M. #4 Bodkin Point (Bodkin Point (cape) – Sparrows Point quad) | | | | |
| √ | √ | Sept. 11, 1972 | --- | AA-16 |
| √ | √ | Apr. 5, 1973 | --- | AA-15 |
| --- | √; slope failure | Apr. 30, 1974 | --- | AA-14 |
| Anne Arundel Thomas Point | | | | |

| Co. B.M. #5 | (Thomas Point (cape) – Annapolis quad) | | | |
|--|---|----------------|-----------|-------|
| --- | √ | Feb. 28, 1964 | --- | AA-59 |
| √ | √ | Nov. 24, 1971 | 4845-4846 | AA-62 |
| √ | √ | Feb. 14, 1972 | 5203-5204 | AA-60 |
| √ | √ | Sept. 11, 1972 | 6052-6053 | AA-65 |
| √ | √ | Oct. 2, 1972 | 6062-6067 | AA-58 |
| B.M. #5 & #6 | √ | Jan. 10, 1973 | --- | AA-57 |
| B.M. #3 | √; “Fort Smallwood” crossed out | Aug. 2, 1974 | --- | AA-56 |
| Anne Arundel Co. B.M. #6 | | | | |
| Thomas Point (Thomas Point (cape) – Annapolis quad) | | | | |
| --- | √ | Feb. 28, 1964 | --- | AA-59 |
| √ | √ | Nov. 24, 1971 | 4847-4848 | AA-63 |
| √ | √ | Feb. 14, 1972 | 5205-5206 | AA-61 |
| √ | √ | Sept. 11, 1972 | 6049-6051 | AA-64 |
| B.M. #5 & #6 | √ | Jan. 10, 1973 | --- | AA-57 |
| Anne Arundel Co. B.M. #7 | | | | |
| Turkey Point (Turkey Point (cape) – Annapolis quad) | | | | |
| --- | √ | Apr. 26, 1958 | --- | AA-70 |
| --- | √; S.C.S. field trip | Dec. 15, 1965 | --- | AA-71 |
| √ | √ | Nov. 24, 1971 | --- | AA-74 |
| √ | √ | Feb. 14, 1972 | 5197-5200 | AA-73 |
| √ | √ | Sept. 11, 1972 | --- | AA-68 |
| √ | √ | Oct. 2, 1972 | 6054-6056 | AA-72 |
| √ | √ | Jan. 10, 1973 | 6598-6600 | AA-67 |
| √ | √ | June 6, 1973 | 7288-7294 | AA-66 |
| √ | √ | June 7, 1977 | --- | AA-69 |
| Anne Arundel Co. B.M. #8 | | | | |
| Saunders Point (Saunders Point (cape) - Annapolis quad) | | | | |
| √ | √ | Nov. 9, 1971 | 4821-4828 | AA-49 |
| √ | √ | Nov. 24, 1971 | 4821-4828 | AA-48 |
| √ | √ | Feb. 14, 1972 | 5195-5196 | AA-47 |
| √ | √ | Sept. 11, 1972 | --- | AA-46 |
| √ | √ | Jan. 10, 1973 | 6603-6604 | AA-45 |
| √ | √ | June 6, 1973 | 7297-7300 | AA-44 |
| √ | √; Colsh | Mar. 22, 1974 | --- | AA-42 |

| | | | | |
|----------------------------------|--|----------------|-----------|------------|
| | property | | | |
| √ | √ | Aug. 2, 1974 | --- | AA-43 |
| √ | √ | June 7, 1977 | --- | AA-50 |
| Anne Arundel Co. B.M. #9 | Beverly Beach (Beverly Beach (populated place) – Deale quad) | | | |
| √ | √ | Nov. 9, 1971 | --- | AA-12 |
| √ | √ | Feb. 14, 1972 | 5201-5202 | AA-11 |
| √ | √ | Sept. 11, 1972 | 6045-6048 | AA-10 |
| √ | √ | Jan. 10, 1973 | 6574-6575 | AA-9 |
| √ | √ | Aug. 2, 1974 | --- | AA-13 |
| Anne Arundel Co. B.M. #10 | Battees Point (Battees Point (cape) – Deale quad) | | | |
| √ | √ | Jan. 10, 1973 | 6591-6592 | AA-8 |
| √ | √ | June 6, 1973 | 7285-7287 | AA-7 |
| Anne Arundel Co. B.M. #X | Arcadia (Arcadia (populated place) – Gibson Island quad) | | | |
| --- | √; Koester prop.; between Pinehurst & Gibson Is. | Aug. 25, 1970 | 2759-2771 | AA-82 |
| --- | √; Koester home | Aug. 31, 1970 | 2784-2790 | AA-76 |
| --- | √; Koester home | Sept. 4, 1970 | 2793-2803 | AA-77 |
| --- | √; Ches. Bay; Koester prop. | Sept. 23, 1970 | --- | AA-78 |
| --- | √; Ches. Bay; Koester prop. | Nov. 5, 1970 | --- | AA-81 |
| --- | √; Koester | Apr. 14, 1971 | 3681-3695 | AA-79 |
| --- | √; Koester prop. | Aug. 5, 1971 | 4369-4373 | AA-83 |
| X | √; Koester | Apr. 3, 1972 | 5492-5505 | AA-80 |
| --- | √; Ches. Bay | Feb. 27, 1973 | --- | AA-6 |
| --- | √; Koester property | Apr. 5, 1973 | 7121-7126 | AA-3 |
| --- | √; Koester property | May 29, 1974 | --- | AA-4, AA-5 |
| --- | √; Koester property | July 29, 1974 | --- | AA-1 |

| | | | | |
|--------------------------------------|--|----------------|-----------|-------|
| --- | √; Koester property | Aug. 2, 1974 | --- | AA-2 |
| Anne Arundel Co. B.M. --- | Shoreham Beach (Shoreham Beach (populated place) – Annapolis quad) | | | |
| --- | √ | Sept. 11, 1972 | --- | AA-54 |
| --- | N. Shoreham Beach | June 6, 1973 | 7295 | AA-53 |
| --- | √ | Aug. 2, 1974 | --- | AA-52 |
| Anne Arundel Co. B.M. --- | Arden on the Severn (Arden on the Severn (populated place) – Round Bay quad) | | | |
| --- | √; Meyerhoff prop. | Mar. 20, 1969 | 1698-1702 | AA-86 |
| --- | √; Harvey M. Meyerhoff prop. | June 20, 1969 | 1879-1880 | AA-85 |
| --- | √; Severn R.; Meyerhoff prop. | May 18, 1970 | 2552-2558 | AA-84 |

APPENDIX A4-2

**Shoreline Film Negative and Photo Envelopes for
Baltimore County, Grouped by Site (Benchmark Number)**

SUMMARY:

| | |
|----------------------------------|-------------------------------|
| Number of negative envelopes: 51 | Number of film negatives: 228 |
| Number of photo envelopes: 52 | Number of photographs: 248 |
| Number of slides: | |

NOTE: A √ in the B.M. # column or in the Location column indicates, respectively, that the B.M. # or the location was included in the label of either or both the film negative and the photograph envelopes.

--- indicates that no relevant information appeared on either envelope

| Table A4-2: Shoreline film negative and photo envelopes for Baltimore County, Maryland | | | | |
|--|---|----------------------------|------------------------|--------------------|
| Benchmark # | Location | Date of photography | Range of slides | Envelope ID |
| Baltimore Co. Miscellaneous | | | | |
| --- | Upper Hart Is.; Lower Hart Is.; Miller Is.; aerial | June 6, 1966 | --- | BA-6 |
| --- | Upper Hart Is., S end | Oct. 6, 1966 | --- | BA-12 |
| --- | Miller Is.; lower inlet | Jan. 3, 1972 | --- | BA-5(a) |
| Baltimore Co. B.M. #1 | | | | |
| Pleasure Island (Hart-Miller Pleasure Islands Natural Resources Management (park) – Middle River quad) | | | | |
| √ | N end Little Hart Is.; N end S Pleasure Is., Back R. | Oct. 17, 1968 | 1659-1660 | BA-17 |
| √ | N end S Hart Is. | May. 26, 1969 | 1825 | BA-16 |
| √ | Hart Is. | Apr. 16, 1971 | 3709 | BA-14 |
| √ | Lower Hart Is. | Aug. 20, 1971 | 4506-4507 | BA-15 |
| √ | √ | Jan. 3, 1972 | --- | BA-5(b) |
| √ | √ | Apr. 21, 1973 | 7129-7135 | BA-51 |
| √ | √ | June 4, 1974 | --- | BA-22 |
| Baltimore Co. B.M. #2 | | | | |
| Hart Island (Hart-Miller Pleasure Islands Natural Resources Management (park) – | | | | |

| | | | | |
|------------------------------|--|---------------|-----------|---------|
| | Middle River quad) | | | |
| √ | S end N Hart Is. | May 26, 1969 | 1826-1828 | BA-19 |
| √; NEW LOCATION | Lower S end Upper Hart Is. | July 30, 1969 | 2008-2014 | BA-21 |
| √ | √ | Apr. 17, 1970 | 2465-2468 | BA-20 |
| √ | √ | July 12, 1971 | 4123-4129 | BA-24 |
| √ | √ | Jan. 3, 1972 | --- | BA-5(c) |
| √ | √ | May 16, 1972 | none | BA-23 |
| √ | √ | Apr. 21, 1973 | 7136-7138 | BA-18 |
| √ | √ | June 4, 1974 | --- | BA-25 |
| Baltimore Co. B.M. #3 | E end Cuckold Pt., Back R. (Cuckold Point (cape) – Sparrows Point quad) | | | |
| √ | √ | July 30, 1969 | 2064-2065 | BA-13 |
| Baltimore Co. B.M. #4 | Hart Island (Hart-Miller Pleasure Islands Natural Resources Management (park) – Middle River quad) | | | |
| √; USGS B.M. | √ | Apr. 17, 1970 | 2464 | BA-11 |
| √ | √ | Apr. 16, 1971 | 3710-3712 | BA-9 |
| √ | Upper Hart Is. | Aug. 20, 1971 | 4508 | BA-7 |
| √ | √ | Jan. 3, 1972 | --- | BA-5(d) |
| √ | √ | May 16, 1972 | none | BA-27 |
| √ | √ | Apr. 21, 1973 | 7161-7163 | BA-8 |
| √ | √ | June 4, 1974 | --- | BA-26 |
| Baltimore Co. B.M. #5 | Hart Island (Hart-Miller Pleasure Islands Natural Resources Management (park) – Middle River quad) | | | |
| √ | √ | Jan. 3, 1972 | --- | BA-5(e) |
| √ | √ | May 16, 1972 | 5577 | BA-30 |
| √ | √ | Apr. 21, 1973 | 7151-7155 | BA-28 |
| √ | √ | June 4, 1974 | --- | BA-29 |
| Baltimore Co. B.M. #6 | Hart Island (Hart-Miller Pleasure Islands Natural Resources Management (park) – Middle River quad) | | | |
| √ | √ | Jan. 3, 1972 | 4947-4949 | BA-5(f) |
| √ | √ | May 16, 1972 | 5585-5587 | BA-32 |
| √ | √ | Apr. 21, 1973 | 7139-7140 | BA-31 |
| √ | √ | June 4, 1974 | --- | BA-10 |
| Baltimore Co. B.M. #7 | Hart Island (Hart-Miller Pleasure Islands Natural Resources Management (park) – Middle River quad) | | | |

| | | | | |
|---|---|---------------|-------------------------------------|------------------|
| √ | √ | Jan. 3, 1972 | 4939-4945; 4950-4958 | BA-5(g) |
| √ | √ | May 16, 1972 | none | BA-35 |
| √ | √ | Apr. 21, 1973 | 7159-7160 | BA-33 |
| √ | √ | June 4, 1974 | --- | BA-34 |
| Baltimore Co. B.M. #8 Hart Island (Hart-Miller Pleasure Islands Natural Resources Management (park) – Middle River quad) | | | | |
| √ | √ | Jan. 3, 1972 | --- | BA-5(h) |
| √ | √ | May 16, 1972 | 5574-5576 | BA-38 |
| √ | √ | Apr. 21, 1973 | 7156-7158 | BA-37 |
| √ | √ | June 4, 1974 | --- | BA-36 |
| Baltimore Co. B.M. #9 Miller Island (Hart-Miller Pleasure Islands Natural Resources Management (park) – Middle River quad) | | | | |
| √ | √ | Jan. 3, 1972 | 4910-4919 | BA-5(i) |
| √ | √ | Apr. 21, 1973 | 7145-7146 | BA-43 |
| √ | √ | June 4, 1974 | --- | BA-40 |
| Baltimore Co. B.M. #10 Miller Island (Hart-Miller Pleasure Islands Natural Resources Management (park) – Middle River quad) | | | | |
| √ | √ | Jan. 3, 1972 | BA-5(j): 4910-4919; 4923-4936 | BA-5(a), BA-5(j) |
| √ | √ | May 16, 1972 | 5581-5582 | BA-45 |
| √ | √ | Apr. 21, 1973 | 7143-7144 | BA-44 |
| √ | √ | June 4, 1974 | --- | BA-42 |
| Baltimore Co. B.M. #11 Miller Island (Hart-Miller Pleasure Islands Natural Resources Management (park) – Middle River quad) | | | | |
| √ | √ | Jan. 3, 1972 | 4937-4938 | BA-5(k) |
| √ | √ | May 16, 1972 | 5583-5584 | BA-47 |
| √ | √ | Apr. 21, 1973 | 7141-7142 | BA-46 |
| √ | √ | June 4, 1974 | --- | BA-41 |
| Baltimore Co. B.M. #12 Miller Island (Hart-Miller Pleasure Islands Natural Resources Management (park) – Middle River quad) | | | | |
| √ | √ | May 16, 1972 | 5578 | BA-49 |
| √ | √ | Apr. 21, 1973 | 7147-7150 | BA-48 |
| √ | √ | June 4, 1974 | --- | BA-39 |

| | | | | |
|-----------------------------------|--|----------------|----------------|-------|
| Baltimore Co. B.M. #13 | Miller Island (Hart-Miller Pleasure Islands Natural Resources Management (park) – Middle River quad) | | | |
| √ | √ | May 16, 1972 | 5579-5580 | BA-50 |
| Baltimore Co. B.M. #X | New Bay Shore Park (Bay Shore Park (historical, populated place) – Sparrows Point quad) | | | |
| --- | √ | Nov. 12, 1948 | --- | BA-4 |
| --- | √ | June 20, 1949 | --- | BA-3 |
| --- | √; Hart Is. | Jan. 10, 1950 | --- | BA-52 |
| --- | √ | Oct. 11, 1953 | 8-10 (color) | BA-2 |
| --- | √ | Sept. 18, 1954 | 86, 88 (color) | BA-1 |

APPENDIX A4-3

**Shoreline Film Negative and Photo Envelopes for
Calvert County, Grouped by Site (Benchmark Number)**

SUMMARY:

| | |
|-----------------------------------|-------------------------------|
| Number of negative envelopes: 167 | Number of film negatives: 692 |
| Number of photo envelopes: 165 | Number of photographs: 666 |
| Number of slides: | |

NOTE: A √ in the B.M. # column or in the Location column indicates, respectively, that the B.M. # or the location was included in the label of either or both the film negative and the photograph envelopes.

--- indicates that no relevant information appeared on either envelope

| Table A4-3: Shoreline film negative and photo envelopes for Calvert County, Maryland | | | | |
|---|--|----------------------------|------------------------|--------------------|
| Benchmark # | Location | Date of photography | Range of slides | Envelope ID |
| Calvert Co. B.M. #1 | Holiday Beach (Holiday Beach (populated place) – North Beach quad) | | | |
| √ | √ | Jan. 21, 1971 | 3221 | CAL-121 |
| √ | √ | Mar. 10, 1971 | 3569 | CAL-120 |
| √ | √ | June 3, 1971 | 4011-4012 | CAL-119 |
| √ | √ | July 14, 1971 | --- | CAL-118 |
| √ | √ | Sept. 29, 1971 | 4880-4881 | CAL-117 |
| √ | √ | July 25, 1972 | 5781-5782 | CAL-116 |
| √ | √ | June 6, 1973 | 7274-7275 | CAL-115 |
| √ | √ | July 22, 1974 | --- | CAL-114 |
| Calvert Co. B.M. #2 | Calvert Cliffs State Park (Calvert Cliffs State Park (park) – Cove Point quad) | | | |
| √ | √; Queen's home | July 15, 1970 | --- | CAL-45 |
| √ | √ | Aug. 7, 1970 | 2739 | CAL-44 |
| √ | √ | Dec. 15, 1970 | 3159-3161 | CAL-43 |
| √ | √ | Jan. 21, 1971 | 3216-3217 | CAL-42 |
| √ | √ | Feb. 18, 1971 | 3439-3442 | CAL-41 |
| √ | √ | Mar. 10, 1971 | 3570-3572 | CAL-40 |
| √ | √ | Apr. 22, 1971 | 3765-3767 | CAL-39 |
| √ | √ | June 2, 1971 | 4001-4004 | CAL-38 |
| √ | √ | July 14, 1971 | --- | CAL-37 |
| √ | √ | Feb. 29, 1972 | 5284-5287 | CAL-36 |
| √ | √ | Sept. 14, 1972 | 5979-5982 | CAL-35 |

| | | | | |
|---|----------------------------------|----------------|-----------|---------|
| √ | √ | Jan. 18, 1973 | 6506-6013 | CAL-34 |
| √ | √ | Aug. 5, 1974 | --- | CAL-33 |
| √ | √ | June 3, 1977 | --- | CAL-46 |
| Calvert Co. B.M. #3 | | | | |
| Flag Ponds, Long Beach (Flag Ponds Park (park) OR Long Beach (populated place) – Cove Point quad) | | | | |
| --- | Long Beach | June 27, 1948 | --- | CAL-93 |
| --- | Long Beach | July 7, 1949 | --- | CAL-95 |
| --- | Long Beach | Nov. 5, 1950 | --- | CAL-94 |
| √ | Flag Ponds, Long Beach | Oct. 5, 1970 | --- | CAL-113 |
| √ | Flag Ponds, Long Beach | Nov. 30, 1970 | 3028-3029 | CAL-112 |
| √ | Flag Ponds, Long Beach | Jan. 21, 1971 | 3211-3213 | CAL-111 |
| √ | Flag Ponds, Long Beach | Mar. 10, 1971 | 3573-3575 | CAL-110 |
| √ | Flag Ponds, Long Beach | Apr. 20, 1971 | 3723-3725 | CAL-109 |
| √ | Flag Ponds (formerly Long Beach) | June 3, 1971 | --- | CAL-108 |
| √ | Flag Ponds, Long Beach | | 4036-4038 | CAL-107 |
| √ | Flag Ponds (formerly Long Beach) | June 15, 1971 | 4094-4101 | CAL-106 |
| (formerly B.M. #3) | Flag Ponds, Long Beach | | 4102-4103 | CAL-105 |
| √; #3, A-B-C | Flag Ponds | July 14, 1971 | --- | CAL-104 |
| √ | Flag Ponds, Long Beach | | --- | CAL-103 |
| --- | Flag Ponds | Sept. 7, 1971 | 4527-4534 | CAL-101 |
| √ | Flag Ponds | | --- | CAL-102 |
| --- | Flag Ponds | Sept. 21, 1971 | 4580-4588 | CAL-100 |
| √ | Flag Ponds | Sept. 30, 1971 | 4877-4879 | CAL-99 |
| √ | Flag Ponds | Oct. 7, 1971 | 4589-4597 | CAL-98 |
| --- | Flag Ponds | Nov. 9, 1971 | --- | CAL-97 |
| --- | Flag Ponds | Nov. 23, 1971 | 4732-4802 | CAL-92 |
| √ | Flag Ponds | Dec. 14, 1971 | --- | CAL-91 |
| --- | | | 4890-4909 | CAL-90 |
| √ | Flag Ponds | Jan, 12, 1972 | --- | CAL-89 |
| √ | Flag Ponds | Feb. 28, 1972 | 5323-5332 | CAL-87 |
| √ | Flag Ponds | Aug. 1, 1972 | --- | CAL-86 |

| | | | | |
|---|--|----------------|-----------|---------|
| √ | Flag Ponds | June 7, 1973 | 7351-7356 | CAL-85 |
| √ | Flag Ponds, Long Beach | July 30, 1974 | --- | CAL-96 |
| √ | Flag Ponds | June 2, 1977 | --- | CAL-88 |
| Calvert Co. B.M. #4 Chesapeake Ranch Club/Estates (Chesapeake Ranch Estates (populated place) – Solomons Island quad) | | | | |
| √ | √; N of Fresh Creek | Oct. 5, 1970 | --- | CAL-31 |
| √ | √ | Nov. 30, 1970 | 3034-3038 | CAL-30 |
| √ | √ | Jan. 21, 1971 | 3222-3223 | CAL-29 |
| √ | √ | Mar. 10, 1971 | 3576 | CAL-28 |
| √ | √ | June 2, 1971 | 4007-4008 | CAL-27 |
| √ | √ | July 14, 1971 | 4137-4139 | CAL-26 |
| √ | √ | Sept. 30, 1971 | --- | CAL-25 |
| √ | √ | Feb. 29, 1972 | 5270-5272 | CAL-24 |
| √ | √ | Sept. 14, 1972 | 5976-5978 | CAL-23 |
| √ | √ | Jan. 11, 1973 | 6584-6587 | CAL-22 |
| B.M. #6 | √ | July 30, 1974 | --- | CAL-20 |
| √ | √ | June 7, 1973 | --- | CAL-21 |
| √ | √ | June 3, 1977 | --- | CAL-32 |
| Calvert Co. B.M. #5 (W of) Drum Point (Drum Point (cape) – Solomons Island quad) | | | | |
| --- | W of Drum Point; Roy Bokam prop. | July 28, 1969 | 2020-2024 | CAL-74 |
| --- | W of Drum Point; Roy Bokam prop. | July 29, 1969 | 2025-2034 | CAL-73 |
| √ | √; Bokam prop. | Oct. 5, 1970 | --- | CAL-84 |
| √ | √ | Jan. 21, 1971 | 3231-3232 | CAL-83 |
| √ | √ | Mar. 10, 1971 | 3577-3578 | CAL-82 |
| √ | √ | June 2, 1971 | 4005-4006 | CAL-81 |
| √ | √ | July 14, 1971 | 4130-4131 | CAL-80 |
| √ | √ | Sept. 30, 1971 | --- | CAL-79 |
| √ | √ | Feb. 29, 1972 | 5268-5269 | CAL-78 |
| √ | √ | Sept. 14, 1972 | 5974-5975 | CAL-72 |
| √ | √ | Jan. 11, 1973 | 6582-6583 | CAL-77 |
| √ | Drum Cliff | June 7, 1973 | --- | CAL-76 |
| √ | √ | July 30, 1974 | --- | CAL-75 |
| Calvert Co. B.M. #6 Prison Point (Prison Point (cape) – Broomes Island quad) | | | | |
| √ | √ | Oct. 6, 1970 | --- | CAL-149 |

| | | | | |
|--|--|----------------|-----------|---------|
| √ | √ | Dec. 15, 1970 | 3157-3158 | CAL-148 |
| √ | √ | Jan. 21, 1971 | 3224 | CAL-147 |
| √ | √ | Mar. 10, 1971 | 3579-3580 | CAL-146 |
| √ | √ | Apr. 23, 1971 | --- | CAL-145 |
| √ | √ | July 15, 1971 | 4159-4160 | CAL-144 |
| √ | √ | Mar. 1, 1972 | --- | CAL-143 |
| √ | √ | Sept. 28, 1972 | 6027-6028 | CAL-142 |
| √ | √ | Aug. 5, 1974 | --- | CAL-141 |
| √ | √ | June 3, 1977 | --- | CAL-150 |
| Calvert Co. B.M. #7 Randle Cliffs (Randall Cliff Beach (populated place) – North Beach quad) | | | | |
| √ | √ | Nov. 25, 1970 | 3019-3024 | CAL-159 |
| √ | √ | Jan. 21, 1971 | 3218-3220 | CAL-158 |
| √ | √ | Apr. 20, 1971 | 3726-3729 | CAL-157 |
| √ | √ | June 3, 1971 | 4013-4016 | CAL-156 |
| √ | √ | Dec. 28, 1971 | --- | CAL-155 |
| √ | √ | Feb. 9, 1972 | 5192-5194 | CAL-154 |
| --- | N. of Randle Cliffs | | 5191 | CAL-167 |
| √ | √ | July 25, 1972 | 5783-5785 | CAL-153 |
| √ | √ | June 6, 1973 | 7277-7280 | CAL-152 |
| √ | √ | July 22, 1974 | --- | CAL-151 |
| Calvert Co. B.M. #8 Plum Point (Plum Point (cape) – Prince Frederick quad) | | | | |
| √ | √ | Nov. 30, 1970 | 3032-3033 | CAL-140 |
| √ | √ | Jan. 21, 1971 | 3214-3215 | CAL-139 |
| √ | √ | Mar. 10, 1971 | 3581-3582 | CAL-138 |
| √ | √ | June 3, 1971 | 4009-4010 | CAL-137 |
| √ | √ | July 14, 1971 | --- | CAL-136 |
| √ | √ | Mar. 1, 1972 | 5302-5303 | CAL-135 |
| √ | √ | Sept. 28, 1972 | --- | CAL-134 |
| √ | √ | June 7, 1973 | --- | CAL-133 |
| √ | √ | July 22, 1974 | --- | CAL-132 |
| Calvert Co. B.M. #9 Cove Point (Cove Point (cape) – Cove Point quad) | | | | |
| √; #9D | √; Columbia Nat'l Gas Co.; future site of mile-long pier | Feb. 11, 1971 | 3365-3372 | CAL-53 |
| √ | √; offshore | Feb. 18, 1971 | 3431-3434 | CAL-54 |
| √; #9 a...d | √ | Apr. 20, 1971 | 3730-3735 | CAL-55 |
| √; #9, A-D | √ | June 2, 1971 | 3992-3998 | CAL-56 |

| | | | | |
|--|---------------------------------|----------------|-----------|---------|
| √; #9, A-B-C-D | √ | July 14, 1971 | --- | CAL-57 |
| √ | √ | Feb. 29, 1972 | 5274-5283 | CAL-58 |
| √; #9, C, D, E | √ | Sept. 15, 1972 | 5985-5987 | CAL-59 |
| √ | √ | Jan. 18, 1973 | --- | CAL-52 |
| √ | √ | | 6514-6545 | CAL-51 |
| √ | √ | Aug. 5, 1974 | --- | CAL-47 |
| Calvert Co. B.M. #10 (N of) Cove Point (Cove Point (cape) – Cove Point quad) | | | | |
| √ | Cove Point | Apr. 20, 1971 | 3736-3738 | CAL-60 |
| √ | N of Cove Point | June 6, 1971 | 3990-3991 | CAL-61 |
| √ | N of Cove Point | July 14, 1971 | 4140-4142 | CAL-62 |
| √ | Cove Point | Sept. 30, 1971 | 4873-4876 | CAL-63 |
| √ | Cove Point | Feb. 29, 1972 | 5273 | CAL-64 |
| √ | Cove Point | Sept. 15, 1972 | 5983-5984 | CAL-65 |
| √ | N of Cove Point | June 3, 1977 | --- | CAL-66 |
| Calvert Co. B.M. #11 (S of) Cove Point (Cove Point (cape) – Cove Point quad) | | | | |
| √ | √ | Apr. 20, 1971 | 3739-3740 | CAL-67 |
| √ | √ | June 2, 1971 | 3999-4000 | CAL-68 |
| √ | S of Cove Point | July 14, 1971 | 4132-4136 | CAL-69 |
| √ | Cove Point | Feb. 29, 1972 | 5289-5291 | CAL-70 |
| √ | Cove Point | Jan. 18, 1973 | --- | CAL-50 |
| √ | Cove Point | June 7, 1973 | --- | CAL-49 |
| √ | Cove Point | | 7357-7364 | CAL-48 |
| √ | S of Cove Point | June 3, 1977 | --- | CAL-71 |
| Calvert Co. B.M. #12 Scientist Cliffs (Scientists Cliffs (populated place) OR Parkers Creek (stream) – Prince Frederick quad) | | | | |
| --- | Parkers Creek; Jett prop. | Apr. 27, 1970 | --- | CAL-162 |
| √ | √; Jett prop. above Parkers Cr. | Apr. 22, 1971 | 3768-3769 | CAL-164 |
| B.M. #13 | √; Jett prop., backyard | | 3770-3771 | CAL-165 |
| B.M. #12, A&B | √ | June 3, 1971 | 4041-4044 | CAL-163 |
| B.M. #12, A&B | √ | July 15, 1971 | --- | CAL-161 |
| √ | √ | Mar. 1, 1972 | 5304-5311 | CAL-160 |
| √ | √ | Sept. 28, 1972 | --- | CAL-166 |

| | | | | |
|---------------------------------|---|----------------|-----------|---------|
| Calvert Co. B.M. #13 | Kenwood Beach (Kenwood Beach (populated place) – Broomes Island quad) | | | |
| --- | √ | Sept. 11, 1951 | --- | CAL-125 |
| --- | √ | Sept. 17, 1955 | --- | CAL-123 |
| √ | √ | June 3, 1971 | 4039-4040 | CAL-131 |
| √ | √ | July 15, 1971 | 4157-4158 | CAL-130 |
| √ | √ | Sept. 29, 1971 | 4888-4889 | CAL-129 |
| --- (aerial) | √ | Nov. 23, 1971 | 4732-4802 | CAL-124 |
| √ | √ | Mar. 1, 1972 | --- | CAL-128 |
| √ | √ | Sept. 28, 1972 | 6025-6026 | CAL-127 |
| √ | √ | July 22, 1974 | --- | CAL-126 |
| Calvert Co. B.M. #14 | Calvert Beach (Calvert Beach (populated place) – Cove Point quad) | | | |
| --- | √ | Sept. 12, 1964 | --- | CAL-6 |
| --- | √ | Nov. 30, 1970 | 3030-3031 | CAL-5 |
| √ | √ | June 3, 1971 | 4033-4035 | CAL-8 |
| √ | √ | June 15, 1971 | 4104-4108 | CAL-7 |
| √ | √ | July 14, 1971 | --- | CAL-4 |
| √ | √ | Sept. 29, 1971 | 4882-4887 | CAL-3 |
| √ | √ | Feb. 29, 1972 | 5294-5301 | CAL-2 |
| √ | √ | July 30, 1974 | --- | CAL-1 |
| Calvert Co. B.M. #15 | Camp Conoy (Camp Conoy (locale) – Cove Point quad) | | | |
| √ | √ | --- | --- | CAL-13 |
| √ | √ | June 2, 1971 | 4078 | CAL-15 |
| √ | √ | July 14, 1971 | --- | CAL-14 |
| √ | √ | Feb. 29, 1972 | 5292-5293 | CAL-12 |
| √ | √ | Sept. 14, 1972 | 5272-5273 | CAL-11 |
| √ | √ | Jan. 11, 1973 | 6588 | CAL-10 |
| √ | √ | June 30, 1974 | --- | CAL-9 |
| √ | √ | June 3, 1977 | --- | CAL-16 |
| Calvert Co. B.M. #16 | S of Chesapeake Beach (Chesapeake Beach (populated place) – North Beach quad) | | | |
| √ | S of S end of Chesapeake Beach | July 25, 1972 | 5786-5787 | CAL-19 |
| √ | S of Chesapeake Beach | June 7, 1973 | --- | CAL-18 |
| Calvert Co. | Camp Kaufman | | | |

| B.M. #17 | (Calvert County) | | | |
|-----------------|-------------------------|----------------|------|---------|
| √ | √ | Sept. 28, 1972 | --- | CAL-122 |
| √ | √ | June 7, 1973 | 7307 | CAL-17 |

APPENDIX A4-4

**Shoreline Film Negative and Photo Envelopes for
Cecil County, Grouped by Site (Benchmark Number)**

SUMMARY:

Number of negative envelopes: 66 Number of film negatives: 281
 Number of photo envelopes: 64 Number of photographs: 297
 Number of slides:

NOTE: A √ in the B.M. # column or in the Location column indicates, respectively, that the B.M. # or the location was included in the label of either or both the film negative and the photograph envelopes.

--- indicates that no relevant information appeared on either envelope

| Table A4-4: Shoreline film negative and photo envelopes for Cecil County, Maryland | | | | |
|---|---|----------------------------|------------------------|--------------------|
| Benchmark # | Location | Date of photography | Range of slides | Envelope ID |
| Cecil Co. B.M. #1 | Grove Point (Grove Point (cape) – Spesutie quad) | | | |
| --- | √ | May 17, 1952 | --- | CE-33 |
| --- | Grove Neck Pt. | Sept. 10, 1955 | --- | CE-31 |
| --- | √ | July 23, 1956 | --- | CE-67 |
| √ | √ | Jan. 20, 1970 | 3081-3082 | CE-25 |
| √ | √; Girl Scout Camp; Ches. Bay | May 11, 1970 | --- | CE-24 |
| √ | √; Girl Scout Camp | July 27, 1970 | --- | CE-23 |
| √ | √ | Aug. 27, 1970 | 2772-2783 | CE-22 |
| √ | √; Girl Scout Camp; Ches. Bay | Nov. 9, 1970 | 2960-2961 | CE-21 |
| √ | √; Ches. Bay | Jan. 7, 1971 | 3171-3173 | CE-26 |
| √ | √ | Mar. 8, 1971 | 3550-3553, 3598 | CE-27 |
| √ | √ | May 24, 1971 | 3898-3901 | CE-28 |
| √ | √ | Aug. 2, 1971 | --- | CE-29 |
| √ | √ | Nov. 1, 1971 | 4664-4669 | CE-30 |
| √ | √ | Feb. 17, 1972 | 5263-5267 | CE-32 |
| √ | √ | Jan. 19, 1973 | 6606-6613 | CE-20 |
| √ | √ | June 18, 1973 | 7431-7438 | CE-18 |
| √ | √ | Apr. 29, 1974 | --- | CE-17 |

| | | | | |
|--|------------------------------------|---------------|-----------|------------------------|
| √ | √ | June 6, 1974 | --- | CE-19 |
| Cecil Co. B.M. #2 | | | | |
| Turkey Point (Turkey Point (cape) – Spesutie quad) | | | | |
| √ | √; Ches. Bay | Nov. 9, 1970 | --- | CE-66 |
| √ | Turkey Point Lighthouse, Ches. Bay | Jan. 7, 1971 | 3169-3170 | CE-65 |
| √ | √ | Mar. 8, 1971 | 3554-3555 | CE-64 |
| √ | √ | May 24, 1971 | 3906-3907 | CE-63 |
| √ | √ | Aug. 2, 1971 | --- | CE-62 |
| √ | √ | Nov. 1, 1971 | 4662-4663 | CE-61 |
| √ | √ | Feb. 17, 1972 | 5257-5258 | CE-60 |
| √ | √ | Jan. 19, 1973 | 6616-6618 | CE-58 |
| √ | √ | Mar. 1, 1973 | 6652-6653 | CE-57 |
| √ | √ | June 18, 1973 | 7426-7427 | CE-56 |
| √ | √ | Apr. 29, 1974 | --- | CE-54, CE-59 |
| √ | √ | June 5, 1974 | --- | CE-55 |
| Cecil Co. B.M. #3 | | | | |
| Carpenter Point (Carpenter Point (cape) – Havre de Grace quad) | | | | |
| √ | √ | Oct. 1, 1970 | --- | CE-13 |
| √ | √ | Nov. 9, 1970 | --- | CE-12 |
| √ | √ | Jan. 7, 1971 | 3166-3168 | CE-11 |
| √ | √ | Mar. 8, 1971 | 3556 | CE-10 |
| √ | √ | May 24, 1971 | 3904-3905 | CE-9 |
| √ | √ | Aug. 2, 1971 | --- | CE-68 |
| √ | √ | Nov. 1, 1971 | --- | CE-7, CE-8 (no photos) |
| √ | √ | Feb. 17, 1972 | 5253-5256 | CE-6 |
| √ | √ | June 30, 1972 | 5682-5683 | CE-5 |
| √ | √ | Feb. 21, 1973 | --- | CE-4 |
| √ | √ | June 18, 1973 | 7420-7423 | CE-3 |
| √ | √ | Apr. 19, 1974 | --- | CE-2 |
| √ | √ | June 5, 1974 | --- | CE-1 |
| Cecil Co. B.M. #4 | | | | |
| Rocky Point (Rocky Point (cape) – Earleville quad) | | | | |
| √ | √; Elk Neck State Park, Ches. Bay | Oct. 1, 1970 | --- | CE-34 |
| √ | √; Ches. Bay | Nov. 9, 1970 | --- | CE-52 |
| √ | √; Ches. Bay | Jan. 7, 1971 | 3174-3175 | CE-51 |
| √ | √ | Mar. 8, 1971 | 3557-3558 | CE-50 |
| √ | √ | May 24, 1971 | 3902-3903 | CE-49 |

| | | | | |
|------------------|--|---------------|-----------|--|
| √ | √ | Aug. 2, 1971 | --- | CE-48 |
| √ | √ | Nov. 1, 1971 | 4670-4671 | CE-47 |
| √ | √ | Feb. 17, 1972 | 5259-5260 | CE-46 |
| √ | √ | June 30, 1972 | 5684-5685 | CE-45 |
| √ | √ | Jan. 19, 1973 | 6614-6615 | CE-44 |
| √ | √ | June 18, 1973 | 7424-7425 | CE-42 |
| √ | √; landslide (CE-41) | Apr. 19, 1974 | --- | CE-41 (no photo envelope), CE- 43 |
| √ | √ | Apr. 29, 1974 | --- | CE-39 |
| √ | √ | June 5, 1974 | --- | CE-40 |
| B.M. #4A | √ | Oct. 11, 1976 | --- | CE-53 |
| Cecil Co. | | | | |
| B.M. #5 | Red Point Beach (Red Point (cape) – North East quad) | | | |
| --- | √ | Mar. 23, 1973 | --- | CE-38 |
| --- | √ | Apr. 29, 1974 | --- | CE-36, CE-37 |
| √ | √ | June 5, 1974 | --- | CE-35 |
| Cecil Co. | | | | |
| B.M. #6 | Elk Neck State Park (Elk Neck State Park (park) – Spesutie quad) | | | |
| --- | √; Elk R. | Mar. 1, 1973 | 6654-6659 | CE-16 |
| --- | √ | June 18, 1973 | 7428-7430 | CE-15 |
| √ | √; beach (cove) | June 5, 1974 | --- | CE-14 |

APPENDIX A4-5

**Shoreline Film Negative and Photo Envelopes for
Charles County, Grouped by Site (Benchmark Number)**

SUMMARY:

| | |
|----------------------------------|-------------------------------|
| Number of negative envelopes: 98 | Number of film negatives: 245 |
| Number of photo envelopes: 98 | Number of photographs: 246 |
| Number of slides: | |

NOTE: A √ in the B.M. # column or in the Location column indicates, respectively, that the B.M. # or the location was included in the label of either or both the film negative and the photograph envelopes.

--- indicates that no relevant information appeared on either envelope

NOTE: The negative envelopes originally labeled CH-19 and CH-28 were misfiled under Charles Co. and subsequently relabeled QA-156 and DO-129, respectively. There are, therefore, no negative or positive envelopes currently labeled CH-19 or CH-28.

| Table A4-5: Shoreline film negative and photo envelopes for Charles County, Maryland | | | | |
|---|--|----------------------|--------------------------|--------------------|
| Benchmark # | Site name | Date of visit | Associated slides | Envelope ID |
| Charles Co. B.M. #1 | Loyola Retreat (Faulkner (populated place) – Popes Creek quad) | | | |
| √ | √; Potomac R. | Dec. 2, 1970 | 3063 | CH-38 |
| √ | √ | Mar. 16, 1971 | --- | CH-37 |
| √ | √ | Apr. 21, 1971 | 3741-3742 | CH-36 |
| √ | √ | June 1, 1971 | 3967 | CH-35 |
| √ | √ | July 16, 1971 | --- | CH-34 |
| √ | √ | Oct. 26, 1971 | --- | CH-33 |
| √ | √ | July 26, 1972 | 5808-5809 | CH-32 |
| √ | √ | June 15, 1973 | --- | CH-31 |
| √ | √ | July 26, 1974 | --- | CH-30 |
| Charles Co. B.M. #2 | Purse State Park (Purse State Park (park) – Widewater quad) | | | |
| √ | √; Wades Bay; Potomac R. | Dec. 2, 1970 | 3059-3062 | CH-77 |
| √ | √ | Mar. 16, 1971 | --- | CH-76 |
| √ | √ | Oct. 26, 1971 | --- | CH-75 |
| √ | √ | Mar. 15, 1972 | 5358-5359 | CH-74 |
| √ | √ | May 8, 1972 | 5563-5564 | CH-73 |
| √ | √ | July 26, 1972 | 5800-5801 | CH-72 |

| | | | | |
|---|---|---------------|-----------|-------|
| √ | √ | June 15, 1973 | 7416-7417 | CH-71 |
| Charles Co. B.M. #3 Potomac View (Potomac View (populated place) – Colonial Beach North quad) | | | | |
| √ | √; Neale Sound; Potomac R.; Raley prop. | Oct. 8, 1970 | --- | CH-70 |
| √ | √; Potomac R. | Dec. 2, 1970 | 3075-3076 | CH-69 |
| √ | √ | Mar. 16, 1971 | 3623-3626 | CH-68 |
| √ | √ | June 1, 1971 | 3973-3975 | CH-67 |
| √ | √ | July 16, 1971 | 4321-4322 | CH-66 |
| √ | √ | Oct. 26, 1971 | --- | CH-65 |
| √ | √ | May 8, 1972 | none | CH-64 |
| √ | √ | July 28, 1972 | 5830-5831 | CH-63 |
| √ | √ | June 13, 1973 | 7407-7408 | CH-62 |
| √ | √ | July 25, 1974 | --- | CH-61 |
| Charles Co. B.M. #4 Banks O'Dee (Banks O'Dee (locale) – Colonial Beach North quad) | | | | |
| --- | √ | Feb. 16, 1963 | --- | CH-4 |
| √ | √; Potomac R. | Oct. 8, 1970 | --- | CH-10 |
| √ | √; Potomac R. | Dec. 2, 1970 | 3072-3073 | CH-9 |
| √ | √ | Mar. 16, 1971 | 3627-3628 | CH-8 |
| √ | √ | June 1, 1971 | 3968-3972 | CH-7 |
| √ | √ | July 16, 1971 | --- | CH-6 |
| √ | √ | Oct. 26, 1971 | --- | CH-5 |
| √ | √ | May 8, 1972 | 5573 | CH-3 |
| √ | √ | July 28, 1972 | 5832-5833 | CH-2 |
| √ | √ | June 13, 1973 | 7403-7406 | CH-1 |
| Charles Co. B.M. #5 Lloyd Point (Lloyd Point (cape) – Colonial Beach North quad) | | | | |
| --- | √; Potomac R.; Baines prop. | Oct. 8, 1970 | --- | CH-29 |
| √ | √; Potomac R. | Dec. 2, 1970 | 3074 | CH-27 |
| √ | √ | Mar. 16, 1971 | 3629-3630 | CH-26 |
| √ | √ | June 1, 1971 | 3986-3989 | CH-25 |
| √ | √ | July 16, 1971 | --- | CH-24 |
| √ | √ | Oct. 26, 1971 | --- | CH-23 |
| √ | √ | May 8, 1972 | 5569-5572 | CH-22 |
| √ | √ | July 28, 1972 | 5834-5836 | CH-21 |
| √ | √ | June 13, 1973 | 7400-7402 | CH-20 |
| Charles Co. Mount Air | | | | |

| B.M. #6 | (Mount Air (populated place) – Mathias Point quad) | | | |
|--------------------|--|---------------|-----------|-------|
| √ | Mt. Air Rd.; Potomac R.; Bourroughs prop. | Oct. 9, 1970 | --- | CH-60 |
| √ | √; Potomac R. | Dec. 2, 1970 | 3068-3071 | CH-59 |
| √ | √ | Mar. 16, 1971 | --- | CH-58 |
| √ | √ | Apr. 21, 1971 | 3743-3746 | CH-57 |
| √ | √ | June 1, 1971 | 3964-3966 | CH-56 |
| √ | √ | July 16, 1971 | --- | CH-55 |
| √ | √ | Oct. 26, 1971 | --- | CH-54 |
| √ | √ | Mar. 15, 1972 | 5366-5367 | CH-53 |
| √ | √ | May 8, 1972 | 5565-5566 | CH-52 |
| √ | √ | July 26, 1972 | 5806-5807 | CH-51 |
| √ | √ | June 15, 1973 | 7409 | CH-50 |
| √ | √ | July 26, 1974 | --- | CH-49 |
| Charles Co. | | | | |
| B.M. #7 | Riverside (Riverside (populated place) – Nanjemoy quad) | | | |
| √ | √; Potomac R. | Oct. 9, 1970 | 2923-2925 | CH-87 |
| √ | √; Potomac R. | Dec. 2, 1970 | 3066-3067 | CH-86 |
| √ | √ | Mar. 16, 1971 | --- | CH-85 |
| √ | √ | June 1, 1971 | 3976-3977 | CH-84 |
| √ | √ | July 16, 1971 | --- | CH-83 |
| √ | √ | Oct. 26, 1971 | --- | CH-82 |
| √ | √ | Mar. 15, 1972 | 5362-5363 | CH-81 |
| √ | √ | July 26, 1972 | 5796-5797 | CH-80 |
| √ | √ | June 15, 1973 | 7412-7413 | CH-79 |
| √ | √ | July 25, 1974 | --- | CH-78 |
| Charles Co. | | | | |
| B.M. #8 | Maryland Point (Maryland Point (cape) – King George quad) | | | |
| √ | √; Potomac R. | Oct. 9, 1970 | --- | CH-48 |
| √ | √; Potomac R. | Dec. 2, 1970 | 3064-3065 | CH-47 |
| √ | √ | Mar. 16, 1971 | --- | CH-45 |
| √ | √; new location | June 1, 1971 | 3978-3979 | CH-46 |
| √ | √ | July 16, 1971 | --- | CH-44 |
| √ | √ | Oct. 26, 1971 | --- | CH-43 |
| √ | √ | Mar. 15, 1972 | 5360-5361 | CH-42 |
| √ | √ | July 26, 1972 | 5798-5799 | CH-41 |
| √ | √ | June 15, 1973 | 7414-7415 | CH-40 |
| √ | √ | July 25, 1974 | --- | CH-39 |
| Charles Co. | | | | |
| B.M. #9 | Windmill Point (Charles County) | | | |

| | | | | |
|--|---|---------------|-----------|--------|
| √ | √ | June 1, 1971 | 3981 | CH-100 |
| √ | √ | July 16, 1971 | --- | CH-99 |
| √ | √ | Oct. 26, 1971 | --- | CH-98 |
| √ | √ | Mar. 15, 1972 | 5364-5365 | CH-97 |
| √ | √ | July 26, 1972 | 5794-5795 | CH-96 |
| √ | √ | June 15, 1973 | 7410-7411 | CH-94 |
| √ | √ | July 25, 1974 | --- | CH-95 |
| Charles Co. B.M. #10 | | | | |
| Liverpool Point (Liverpool Point (cape) – Widewater quad) | | | | |
| √ | √ | June 1, 1971 | 3980-3985 | CH-18 |
| √ | √ | Oct. 26, 1971 | --- | CH-17 |
| √ | √ | Mar. 15, 1972 | 5356-5357 | CH-16 |
| √ | √ | July 26, 1972 | 5802-5803 | CH-15 |
| √ | √ | June 15, 1973 | 7418-7419 | CH-14 |
| Charles Co. B.M. #11 | | | | |
| Waverly Point (Waverly Point (cape) – Colonial Beach North quad) | | | | |
| B.M. #13 | √ | Dec. 2, 1971 | 4855-4856 | CH-93 |
| √ | √ | May 8, 1972 | 5567-5568 | CH-90 |
| √ | √ | July 28, 1972 | 5837-5838 | CH-89 |
| √ | √ | June 13, 1973 | 7397-7399 | CH-88 |
| √ | √ | July 25, 1974 | --- | CH-91 |
| Charles Co. B.M. #12 | | | | |
| Goose Bay (Goose Bay (bay) – Quantico quad) | | | | |
| √ | √ | Mar. 15, 1972 | 5354-5355 | CH-13 |
| √ | √ | May 8, 1972 | 5561-5562 | CH-12 |
| √ | √ | July 26, 1972 | 5804-5805 | CH-11 |
| √ | √ | July 25, 1974 | --- | CH-92 |

APPENDIX A4-6

**Shoreline Film Negative and Photo Envelopes for
Dorchester County, Grouped by Site (Benchmark Number)**

SUMMARY:

| | |
|-----------------------------------|-------------------------------|
| Number of negative envelopes: 133 | Number of film negatives: 472 |
| Number of photo envelopes: 129 | Number of photographs: 457 |
| Number of slides: | |

NOTE: A √ in the B.M. # column or in the Location column indicates, respectively, that the B.M. # or the location was included in the label of either or both the film negative and the photograph envelopes.

--- indicates that no relevant information appeared on either envelope

NOTE: The negative envelope labeled DO-129 was originally misfiled under Charles Co. and labeled CH-28. The envelope was subsequently relabeled DO-129 and filed under Dorchester Co. There are now no negative or positive envelopes labeled CH-28.

| Table A4-6: Shoreline film negative and photo envelopes for Dorchester County, Maryland | | | | |
|--|--|----------------------|--------------------------|--------------------|
| Benchmark # | Site name | Date of visit | Associated slides | Envelope ID |
| Dorchester Co. Miscellaneous | | | | |
| --- | Susquehanna Neck; Little Choptank R.; Brighoff | Feb. 15, 1967 | --- | DO-93 |
| --- | Susquehanna Neck; Little Choptank R.; Brighoff prop. | July 18, 1969 | --- | DO-92 |
| --- (B.M. #4?) | Punch Is.; Ches. Bay | Sept. 29, 1970 | --- | DO-108 |
| Dorchester Co. B.M. #1 | | | | |
| Cook Point (Cook Point (cape) – Tilghman quad) | | | | |
| --- | √ | May 20, 1951 | --- | DO-11 |
| --- | √ | Feb. 17, 1964 | --- | DO-13 |
| √ | √ | June 24, 1969 | 1923-1931 | DO-23 |
| √ | √ | Mar. 10, 1970 | 3130-3131 | DO-25 |
| √ | √; Ches. Bay | May 11, 1970 | --- | DO-24 |
| √ | √ | July 9, 1970 | --- | DO-22 |
| √ | √; Ches. Bay | Sept. 22, 1970 | --- | DO-21 |

| | | | | |
|---|---|---------------|---------------------|--------------|
| √ | √; Ches. Bay | Nov. 24, 1970 | --- | DO-20 |
| B.M. #1A; B.M. #1 | √; Ches. Bay | Dec. 17, 1970 | 3153, 3164- 3165 | DO-18, DO-19 |
| √ | √ | Mar. 19, 1971 | 3665-3667 | DO-17 |
| √ | √ | May 14, 1971 | 3886-3897 | DO-16 |
| √ | √ | Aug. 25, 1971 | --- | DO-15 |
| √ | √ | Oct. 18, 1971 | --- | DO-14 |
| √ | √ | Mar. 16, 1972 | 5378-5382 | DO-12 |
| √ | √ | Aug. 14, 1974 | --- | DO-10 |
| --- | √ | May 21, 1976 | --- | DO-130 |
| √ | √ | May 22, 1977 | --- | DO-26 |
| Dorchester Co. James Island B.M. #2, #3, (James Island (island) –Hudson quad) #14, #15 | | | | |
| --- | Lower James Is. to W shore entrance of Oyster Cove | July 11, 1969 | 1975 | DO-74 |
| --- | √ | | 1969-1974 | DO-75 |
| --- | N. James Is. | July 18, 1969 | --- | DO-73 |
| #2 | √ | July 30, 1970 | --- | DO-72 |
| --- | √; Ches. Bay | Nov. 10, 1970 | --- | DO-69 |
| #2, #3 | √ | May 12, 1971 | 3864-3872 | DO-71 |
| #2, #3, #14, #15 | √ | Mar. 28, 1972 | 5467-5470 | DO-70 |
| #14, #15 | √ | May 10, 1973 | 7221-7224 | DO-67 |
| --- | √ | | --- | DO-68 |
| #2 | √ | Aug. 6, 1974 | --- | DO-66 |
| Dorchester Co. Taylors Island B.M. #4 (Taylors Island (island) – Taylors Island quad) | | | | |
| √ | √; S. Taylors Is.; Ches. Bay; Henkel (Kirkhoff) prop. | July 18, 1969 | 1985-1994 | DO-118 |
| √ | √; S. Taylors Is.; former Kirkhoff prop. | Mar. 16, 1970 | 3142-3145 | DO-117 |
| √ | √; Ches. Bay | May 11, 1970 | --- | DO-116 |
| √ | √ | Nov. 24, 1970 | 2967-2968 | DO-115 |
| √ | √ | Mar. 19, 1971 | 3668-3669 | DO-114 |
| √ | √ | Apr. 29, 1971 | 3811 | DO-112 |
| √ | √; N of Punch | Aug. 25, 1971 | --- | DO-111 |

| | | | | |
|---|--|----------------|-----------|--------------|
| | Is. Cr. | | | |
| √ | √ | Oct. 18, 1971 | --- | DO-109 |
| √ | √ | Mar. 16, 1972 | 5387-5389 | DO-107 |
| √ | √ | Mar. 28, 1972 | 5472 | DO-106 |
| √ | √ | July 27, 1972 | 5825-5827 | DO-105 |
| --- | √; well rings | May 10, 1973 | --- | DO-103 |
| √ | √ | | --- | DO-104 |
| √ | √ | Aug. 14, 1974 | --- | DO-102 |
| √ | √ | Oct. 13, 1976 | --- | DO-27 |
| Dorchester Co. Hills Point Cove | | | | |
| B.M. #5 | (Hills Point Cove (bay) – Hudson quad) | | | |
| √ | √; Ches. Bay; Grantland prop. | Sept. 28, 1970 | --- | DO-48, DO-49 |
| √ | √; Ches. Bay | Nov. 24, 1970 | 2979-2980 | DO-47 |
| √ | √ | Mar. 19, 1971 | 3670-3671 | DO-46 |
| √ | √ | Apr. 29, 1971 | 3807-3808 | DO-45 |
| √ | √ | June 8, 1971 | 4092-4093 | DO-44 |
| √ | √ | Aug. 25, 1971 | --- | DO-43 |
| √ | √ | Nov. 11, 1971 | 4833-4834 | DO-42 |
| √ | √ | Mar. 16, 1972 | 5368-5372 | DO-41 |
| √ | √ | Mar. 28, 1972 | 5465 | DO-40 |
| √ | √ | Aug. 14, 1974 | --- | DO-39 |
| --- | √ | June 7, 1976 | --- | DO-131 |
| √ | √ | Oct. 13, 1976 | --- | DO-28 |
| √ | √ | May 22, 1977 | --- | DO-129 |
| Dorchester Co. Evans Camp (Taylors Island) | | | | |
| B.M. #6 | (Taylors Island (island) – Taylors Island quad) | | | |
| √ | √; Ches. Bay; Bay Shore Rd. | Sept. 29, 1970 | --- | DO-38 |
| √ | √ | Nov. 24, 1970 | 2984-2986 | DO-37 |
| √ | Evans Camp | Mar. 19, 1971 | 3672-3673 | DO-36 |
| √ | √ | Aug. 25, 1971 | --- | DO-35 |
| √ | Evans Camp | Oct. 18, 1971 | --- | DO-33 |
| √ | Evans Camp | Mar. 16, 1972 | 5385-5386 | DO-32 |
| √ | Evans Camp | July 27, 1972 | 5822-5824 | DO-31 |
| √ | Evans Camp | May 10, 1973 | --- | DO-30 |
| √ | √ | Aug. 14, 1974 | --- | DO-29 |
| √ | Evans Camp | Oct. 13, 1976 | --- | DO-34 |
| Dorchester Co. Swan Island | | | | |
| B.M. #7 | (Swan Island (island) –Honga quad) | | | |
| √ | √; Swan Is. Rd.; Middle Hooper | Sept. 29, 1970 | --- | DO-101 |

| | | | | |
|--|---|----------------|-----------|--------|
| | Is.; Ches. Bay | | | |
| √ | √; Swan Is. Rd.; Middle Hooper Is.; Ches. Bay | Nov. 24, 1970 | 2992-2995 | DO-100 |
| √ | √; Swan Is. Rd.; Middle Hooper Is. | Mar. 19, 1971 | 3663-3664 | DO-99 |
| √ | √; Swan Is. Rd. | Aug. 25, 1971 | --- | DO-98 |
| √ | √; Swan Is. Rd. | Nov. 18, 1971 | --- | DO-97 |
| √ | √; Swan Is. Rd. | Mar. 16, 1972 | 5490-5491 | DO-96 |
| √ | √; Swan Is. Rd. | July 27, 1972 | 5818-5819 | DO-95 |
| --- | √ | Aug. 14, 1974 | --- | DO-94 |
| Dorchester Co. B.M. #8 Pons Point (Upper Hooper Island) (Pons Point (cape) – Honga quad) | | | | |
| √ | √; Ches. Bay; Dear/Dean prop. | Sept. 29, 1970 | --- | DO-76 |
| √ | √; Ches. Bay | Nov. 24, 1970 | 2989-2991 | DO-77 |
| √ | √ | Mar. 19, 1971 | 3674 | DO-79 |
| √ | √ | Nov. 18, 1971 | 4839-4840 | DO-78 |
| √ | √; Pons Pt. | Mar. 16, 1972 | 5392 | DO-82 |
| √ | √; Pons Pt. | July 27, 1972 | 5820-5821 | DO-81 |
| √ | √; Pons Pt. | Aug. 14, 1974 | --- | DO-80 |
| Dorchester Co. B.M. #9 Hog Island (Hog Island (populated place) – Bloodsworth Island quad) | | | | |
| √ | √ | Jan. 17, 1964 | --- | DO-56 |
| √ | √ | Sept. 28, 1970 | --- | DO-55 |
| √ | √; Hooper Str. | Nov. 24, 1970 | 2973-2978 | DO-54 |
| √ | √ | Mar. 18, 1971 | 3659-3660 | DO-53 |
| √ | √ | Apr. 29, 1971 | 3818-3820 | DO-52 |
| √ | √ | July 27, 1972 | 5810-5812 | DO-51 |
| √ | √ | Aug. 14, 1974 | --- | DO-50 |
| --- | √ | June 7, 1976 | --- | DO-132 |
| √ | √ | Oct. 13, 1976 | --- | DO-57 |
| Dorchester Co. B.M. #10 Bishops Head Point (Bishops Head Point (cape) – Bloodsworth Island quad) | | | | |
| √ | √; Hooper Strait | Sept. 28, 1970 | --- | DO-8 |
| √ | Bishops Head; Hooper Strait | Nov. 24, 1970 | 2969-2972 | DO-7 |
| √ | Bishops Head | Mar. 18, 1971 | 3661-3662 | DO-6 |
| √ | Bishops Head | Apr. 29, 1971 | 3816-3817 | DO-5 |

| | | | | |
|---|-----------------|---------------|-----------|--------|
| √ | Bishops Head | Aug. 25, 1971 | --- | DO-4 |
| √ | Bishops Head | Nov. 18, 1971 | 4841-4842 | DO-3 |
| √ | Bishops Head | July 27, 1972 | 5813-5814 | DO-2 |
| --- | Bishops Head | Aug. 14, 1974 | --- | DO-1 |
| √ | Bishops Head | Oct. 13, 1976 | --- | DO-9 |
| Dorchester Co. Causeway – Hooper Island (Middle Hooper Island (island) – Honga quad) | | | | |
| √ | √; Ches. Bay | Nov. 24, 1970 | 2987-2988 | DO-65 |
| √ | √ | Mar. 19, 1971 | 3675-3676 | DO-64 |
| √ | √ | Aug. 25, 1971 | --- | DO-62 |
| √ | √ | Nov. 18, 1971 | --- | DO-63 |
| √ | √ | Mar. 16, 1972 | 5487-5488 | DO-61 |
| √ | √ | July 27, 1972 | 5815-5817 | DO-60 |
| --- | √ | Aug. 14, 1974 | --- | DO-58 |
| Dorchester Co. Taylors Island (Toby's Hideaway) (Taylors Island (island) – Taylors Island quad) | | | | |
| √ | √; Ches. Bay | Nov. 24, 1970 | 2981-2983 | DO-124 |
| √ | √ | Mar. 19, 1971 | 3677-3678 | DO-113 |
| √ | √ | Apr. 29, 1971 | 3814-3815 | DO-110 |
| √ | Toby's Hideaway | Aug. 25, 1971 | --- | DO-123 |
| √ | Toby's Hideaway | Oct. 18, 1971 | --- | DO-122 |
| √ | Toby's Hideaway | Mar. 16, 1972 | 5390-5391 | DO-121 |
| √ | Toby's Hideaway | July 27, 1972 | 5828-5829 | DO-120 |
| --- | Toby's Hideaway | May 10, 1973 | --- | DO-119 |
| Dorchester Co. Ragged Island (Ragged Island (island) – Hudson quad) | | | | |
| √ | √; Ches. Bay | Dec. 17, 1970 | 3162-3163 | DO-91 |
| √ | √ | Mar. 19, 1971 | 3679-3680 | DO-90 |
| √ | √ | Apr. 29, 1971 | 3809-3810 | DO-89 |
| √ | √ | June 8, 1971 | 4088-4091 | DO-88 |
| √ | √ | Aug. 25, 1971 | --- | DO-87 |
| √ | √ | Nov. 18, 1971 | 4835-4838 | DO-86 |
| √ | √ | Mar. 16, 1972 | 5373-5377 | DO-85 |
| √ | √ | May 10, 1973 | 7234-7238 | DO-83 |
| √ | √ | Aug. 6, 1974 | --- | DO-84 |
| Dorchester Co. Todds Point | | | | |

| B.M. #16 | (Todds Point (cape) – Oxford quad) | | | |
|-----------------|---|---------------|-----------|--------|
| --- | √ | Oct. 28, 1963 | --- | DO-125 |
| √ | √ | Mar. 16, 1972 | 5383-5384 | DO-126 |
| √ | √ | Aug. 14, 1974 | --- | DO-127 |
| --- | √ | May 21, 1976 | --- | DO-133 |
| √ | √ | Oct. 13, 1976 | --- | DO-59 |
| √ | √ | May 22, 1977 | --- | DO-128 |

APPENDIX A4-7

**Shoreline Film Negative and Photo Envelopes for
Kent County, Grouped by Site (Benchmark Number)**

SUMMARY:

Number of negative envelopes: 135 Number of film negatives: 484
 Number of photo envelopes: 137 Number of photographs: 510
 Number of slides:

NOTE: A √ in the B.M. # column or in the Location column indicates, respectively, that the B.M. # or the location was included in the label of either or both the film negative and the photograph envelopes.

--- indicates that no relevant information appeared on either envelope

NOTE: The negative envelope originally labeled KE-62 was misfiled under Kent Co. and subsequently relabeled QA-159. There is, therefore, no negative or positive envelope currently labeled KE-62.

| Table A4-7: Shoreline film negative and photo envelopes for Kent County, Maryland | | | | |
|--|--------------------------------|----------------------|--------------------------|--------------------|
| Benchmark # | Site name | Date of visit | Associated slides | Envelope ID |
| Kent Co. Miscellaneous | | | | |
| --- | Aerial – Kent Co. Towers | Apr. 30, 1974 | --- | KE-3 |
| Kent Co. Andalot Farm (Worton Point (cape) – Hanesville quad) | | | | |
| --- | √; Worton Pt. | June 6, 1969 | 1861-1870 | KE-15 |
| --- | √; Worton Pt. | Aug. 1, 1969 | 1998-2007; 2015-2016 | KE-14 |
| √ | √; Worton Pt. | May 11, 1970 | --- | KE-12 |
| √ | √; Worton Pt. | July 27, 1970 | --- | KE-11 |
| √ | √; S. Andalot B.M.; Worton Pt. | Nov. 13, 1970 | --- | KE-10 |
| √ | √; Copeland home | Mar. 9, 1971 | 3559-3560 | KE-8 |
| √ | √; Copeland | May 24, 1971 | 3923-3924 | KE-7 |
| √ | √ | Nov. 2, 1971 | --- | KE-2 |
| √ | √ | Feb. 16, 1972 | 5251-5252 | KE-1 |
| √ | √ | Feb. 21, 1973 | 6639-6642 | KE-6 |
| √ | √ | June 27, 1973 | 7560-7562 | KE-5 |

| | | | | |
|--|---|-----------------|-----------|--------|
| √ | Worton Pt. (is this right plaCHment?) | Apr. 29, 1974 | --- | KE-128 |
| √ | √ | June 6, 1974 | --- | KE-4 |
| √ | √ | Oct. 11, 1976 | --- | KE-9 |
| √ | √ | May 26, 1977 | --- | KE-13 |
| √ | √ | Nov. 15, 1976 | --- | KE-139 |
| Kent Co. B.M. #2 | | | | |
| Trumpington (Farm) (Rock Hall (populated place) – Swan Point quad) | | | | |
| √ | √ | Jun. 19, 1969 | 1903-1904 | KE-126 |
| √ | √; S. of Rock Hall | Jan. 20, 1970 | --- | KE-125 |
| √ | √; Wilson Farm; S. of Rock Hall; Ches. Bay | May 11, 1970 | --- | KE-124 |
| √ - new location | √; Wilson Farm; S. of Rock Hall | Sep. 3, 1970 | --- | KE-123 |
| √ | √; Ches. Bay | Nov. 19, 1970 | 3005-3006 | KE-121 |
| √ | √; Ches. Bay | Jan. 13, 1971 | 3176 | KE-120 |
| √ | √ | Mar. 9, 1971 | 3561-3562 | KE-119 |
| √ | √ | Apr. 19, 1971 | 3713-3714 | KE-118 |
| √ | √ | May 28, 1971 | 3931-3932 | KE-117 |
| √ | √ | Aug. 13, 1971 | 4449-4450 | KE-116 |
| √ | √ | Sep. 9, 1971 | 4538 | KE-115 |
| √ | √ | Nov. 2, 1971 | --- | KE-114 |
| √ | √ | Feb. 15, 1972 | 5211-5212 | KE-113 |
| √ | Wilson Farm | Mar. 1, 1973 | 6699-6701 | KE-122 |
| √ | √ | June 7, 1974 | --- | KE-112 |
| Kent Co. B.M. #3 | | | | |
| Bungay Hill Farm (Swan Point (cape) – Swan Point quad) | | | | |
| √ | √; N of Swann Pt. | July 14, 1970 | 2653-2654 | KE-25 |
| √ | √; Ches. Bay | Nov. 13, 1970 | --- | KE-24 |
| √ | √; Ches. Bay | Jan. 13, 1971 | 3179-3180 | KE-23 |
| √ | √ | Mar. 9, 1971 | 3594 | KE-22 |
| √ | √ | Apr. 19, 1971 | 3715-3716 | KE-21 |
| √ | √ | Aug. 13, 1971 | 4451-4452 | KE-20 |
| √ | √ | Nov. 2, 1971 | --- | KE-19 |
| √ | √ | July 3(?), 1972 | --- | KE-18 |
| √ | √ | Mar. 1, 1973 | 6689-6690 | KE-17 |
| √ | √ | June 7, 1974 | --- | KE-16 |

| Kent Co. B.M. #4 | Stillpond (Rocky Point (cape) – Hanesville quad) | | | |
|-----------------------------|---|---------------|-------------------------|--------|
| --- | Stillpond area | Oct. 14, 1968 | 1614-1615; 1619-1629 | KE-89 |
| √ | √; N. Andalot, S. shore of Still Pond | Nov. 9, 1970 | --- | KE-86 |
| √ | Andalot; S. shore Still Pond | Jan. 13, 1971 | --- | KE-90 |
| √ | S. of Stillpond | Mar. 9, 1971 | 3563-3564 | KE-92 |
| √ | Stillpond | May 24, 1971 | 3919-3920 | KE-93 |
| √ | S. of Stillponds | Aug. 18, 1971 | 4694-4695 | KE-88 |
| √ | S. of Stillpond | Nov. 2, 1971 | 4674-4675 | KE-87 |
| √ | Rocky Pt. | Feb. 16, 1972 | 5241-5245 | KE-94 |
| √ | √ | Feb. 21, 1973 | 6620-6624 | KE-85 |
| √ | √ | June 18, 1973 | --- | KE-91 |
| √ | √ | June 6, 1974 | --- | KE-84 |
| √ | Tower #7; Rock Pt. | May 26, 1977 | --- | KE-95 |
| Kent Co. B.M. #5 | Worton Pt. (Worton Point (cape) – Hanesville quad) | | | |
| √ | √; Ches. Bay | Nov. 9, 1970 | --- | KE-136 |
| √ | √; Ches. Bay | Jan. 13, 1971 | --- | KE-135 |
| √ | √ | Mar. 9, 1971 | 3565-3566 | KE-134 |
| √ | √ | May 24, 1971 | 3921-3922 | KE-133 |
| √ | √ | Nov. 2, 1971 | --- | KE-132 |
| √ | √ | Feb. 16, 1972 | 5246-5250 | KE-131 |
| √ | √ | Feb. 21, 1973 | 6625-6637 | KE-130 |
| √ | √ | June 18, 1973 | --- | KE-129 |
| √ | √ | June 6, 1974 | --- | KE-127 |
| Kent Co. B.M. #6 | Fairlee Neck (Fairlee Neck (cape) – Hanesville quad) | | | |
| √ | √; Ches. Bay | Nov. 13, 1970 | --- | KE-53 |
| √ | √ | Jan. 13, 1971 | --- | KE-52 |
| √ | √ | Mar. 9, 1971 | 3567-3568 | KE-51 |
| √ | √ | Apr. 19, 1971 | 3717-3718 | KE-50 |
| √ | √ | May 25, 1971 | 3911-3912 | KE-49 |
| √ | √ | Aug. 18, 1971 | 4460-4461 | KE-48 |
| √ | √ | Nov. 2, 1971 | --- | KE-47 |
| √ | √ | Feb. 16, 1972 | 5235-5240 | KE-46 |
| √ | √ | Mar. 1, 1973 | 6660-6669 | KE-45 |
| √ | √ | June 27, 1973 | 7569-7572 | KE-44 |

| | | | | |
|--|---|---------------|-----------|--------|
| √ | √ | June 6, 1974 | --- | KE-32 |
| √ (?) | √ | May 26, 1977 | --- | KE-54 |
| Kent Co. B.M. #7 (U.S. Army B.M., Sta. #10) | | | | |
| Govt. Tower, S of Fairlee Cr. (Fairlee Creek (stream) – Hanesville quad) | | | | |
| √ | √ | July 14, 1970 | 2655-2658 | KE-31 |
| √ | S of Fairlee Cr.; Ches. Bay | Nov. 13, 1970 | --- | KE-43 |
| √ | S of Fairlee Cr.; Ches. Bay | Jan. 13, 1971 | --- | KE-42 |
| √ | S of Fairlee Cr. | Mar. 9, 1971 | --- | KE-41 |
| √ | S of Fairlee Cr. | Apr. 19, 1971 | 3719-3720 | KE-40 |
| √ | S of Fairlee Cr. | Aug. 13, 1971 | 4690-4691 | KE-39 |
| √ | S of Fairlee Cr. | Nov. 2, 1971 | --- | KE-38 |
| √ | S of Fairlee Cr. | Feb. 16, 1972 | 5231-5234 | KE-35 |
| √ | Fairlee Cr. | Mar. 1, 1973 | 6670-6676 | KE-34 |
| √ | Fairlee Cr. | June 27, 1973 | 7563-7568 | KE-33 |
| √ | Fairlee Cr. | June 6, 1974 | --- | KE-37 |
| Kent Co. B.M. #8 | | | | |
| Mouth - Fairlee Cr. (Mitchell Bluff (beach) – Rock Hall quad) | | | | |
| √ | Mitchell Bluff; Ches. Bay; old tower E gone | Sep. 16, 1970 | --- | KE -76 |
| √ | Mitchell Bluff; Ches. Bay | Nov. 13, 1970 | --- | KE -75 |
| √ | Mitchell Bluff; Ches. Bay | Jan. 13, 1971 | --- | KE -74 |
| √ | Mitchell Bluff | Mar. 9, 1971 | --- | KE -73 |
| √ | Mitchell Bluff | Aug. 18, 1971 | 4462-4463 | KE -72 |
| √ | Mitchell Bluff | Aug. 25, 1971 | --- | KE -71 |
| √ | Mitchell Bluffs | Nov. 2, 1971 | --- | KE -70 |
| √ | Mitchell Bluff | Feb. 16, 1972 | 5229-5230 | KE -77 |
| √ | Mitchell Bluff | Mar. 1, 1973 | --- | KE -69 |
| √ | Mitchell Bluff | June 27, 1973 | 7543 | KE -68 |
| √ | √ | Apr. 30, 1974 | --- | KE-36 |
| √ | Mitchell Bluff | June 6, 1974 | --- | KE-67 |
| ? don't know if this belongs here or not | So of Kent 8; Tolchester Beach | May 27, 1977 | --- | KE-78 |
| Kent Co. B.M. #9 | | | | |
| Tolchester (Tolchester Beach (populated place) – Rock Hall quad) | | | | |

| | | | | |
|---|---|---------------|-----------|--------|
| --- | Tolchester Beach | Nov. 4, 1961 | --- | KE-137 |
| √ | S. of Tolchester Beach; Ches. Bay; B.M. – Tower F | Sep. 16, 1970 | --- | KE-110 |
| √ | S. of Tolchester Beach; Ches. Bay | Nov. 13, 1970 | --- | KE-109 |
| √ | S. of Tolchester Beach; Ches. Bay | Jan. 13, 1971 | --- | KE-108 |
| √ | S. of Tolchester | Mar. 9, 1971 | 3515 | KE-107 |
| √ | S. of Tolchester | Nov. 2, 1971 | 4672-4673 | KE-106 |
| √ | S. of Tolchester | Feb. 15, 1972 | 5224-5228 | KE-105 |
| √ | √ | Mar. 1, 1973 | 6670-6680 | KE-104 |
| √ | √ | June 27, 1973 | 7538-7542 | KE-103 |
| √ | √ | June 6, 1974 | --- | KE-102 |
| √ | Gales Farm | May 27, 1977 | --- | KE-111 |
| Kent Co. B.M. #10 Steel Tower (Chesapeake Bay shore S of Tolchester Beach and N of Swan Point; see field map) | | | | |
| --- | Swan Point, 2½ mi. N | Aug. 26, 1964 | --- | KE-138 |
| √ | N. of Swan Pt. | Nov. 13, 1970 | --- | KE-101 |
| √ | N. of Swan Pt.; Ches. Bay | Jan. 13, 1971 | 3177-3178 | KE-100 |
| √ | N. of Swan Pt. | Mar. 9, 1971 | 3596-3597 | KE-99 |
| √ | N. of Swan Pt. | Apr. 19, 1971 | 3721-3722 | KE-98 |
| √ | N. of Swan Pt. | Aug. 13, 1971 | 4457-4458 | KE-97 |
| √ | N. of Swan Pt. | Nov. 2, 1971 | --- | KE-96 |
| √ | √ | Feb. 15, 1972 | 5217-5221 | KE-82 |
| √ | √ | July 3, 1972 | --- | KE-81 |
| √ | √; (Swan Pt.) | Mar. 1, 1973 | 6681-6688 | KE-80 |
| √ | √ | June 7, 1974 | --- | KE-79 |
| √ | N of Swan Pt.; Driftwood Tower | May 27, 1977 | --- | KE-83 |
| Kent Co. B.M. #11 Huntingfield (Farm) (Huntingfield Point (cape) – Langford Creek quad) | | | | |
| √ | √; Huntingfield | May 28, 1971 | 3933-3948 | KE-60 |

| | | | | |
|----------------------------------|---|---------------|-----------|-------|
| | Pt. | | | |
| √ | √ | Aug. 18, 1971 | 4682-4689 | KE-59 |
| √ | √ | Nov. 2, 1971 | --- | KE-58 |
| √ | √ | Feb. 15, 1972 | 5213-5216 | KE-57 |
| √ | √ | Mar. 1, 1973 | 6691-6698 | KE-56 |
| √ | √ | June 7, 1974 | --- | KE-55 |
| Kent Co. Eastern Neck Is. | | | | |
| B.M. #12 | (Eastern Neck Island (island) – Langford Creek quad) | | | |
| --- | √ | July 24, 1959 | --- | KE-26 |
| √ | √ | Feb. 15, 1972 | 5209-5210 | KE-27 |
| √ | √ | Mar. 1, 1973 | 6702-6703 | KE-28 |
| √ | √ | July 15, 1974 | --- | KE-29 |
| #12A | √ | Nov. 11/1976 | --- | KE-30 |
| √ | √; E.N.I. South | May 27, 1977 | --- | KE-61 |
| Kent Co. Meeks Pt. | | | | |
| B.M. #13 | (Meeks Point (cape) – Hanesville quad) | | | |
| √ | √ | Feb. 16, 1972 | none | KE-66 |
| √ | √ | Feb. 21, 1973 | 6618-6619 | KE-65 |
| √ | √ | June 18, 1973 | --- | KE-64 |
| √ | √ | June 6, 1974 | --- | KE-63 |

APPENDIX A4-8

**Shoreline Film Negative and Photo Envelopes for
Queen Anne’s County, Grouped by Site (Benchmark Number)**

SUMMARY:

| | |
|-----------------------------------|-------------------------------|
| Number of negative envelopes: 161 | Number of film negatives: 481 |
| Number of photo envelopes: 160 | Number of photographs: 462 |
| Number of slides: | |

NOTE: A √ in the B.M. # column or in the Location column indicates, respectively, that the B.M. # or the location was included in the label of either or both the film negative and the photograph envelopes.

--- indicates that no relevant information appeared on either envelope

NOTE: The negative envelope labeled QA-158 was originally misfiled under Talbot Co. and labeled TA-68. The envelope was subsequently relabeled QA-158 and filed under Queen Anne’s Co. Likewise, the negative envelope labeled QA-159 was originally misfiled under Kent Co. and labeled KE-62. The envelope was subsequently relabeled QA-159 and filed under Queen Anne’s Co. There are now no negative or positive envelopes labeled TA-68 or KE-62.

Table A4-8: Shoreline film negative and photo envelopes for Queen Anne’s County, Maryland

| Benchmark # | Site name | Date of visit | Associated slides | Envelope ID |
|---|---|----------------------|--------------------------|--------------------|
| Q.A. Co. Miscellaneous | | | | |
| --- | Prospect Bay | July 9, 1955 | --- | QA-110 |
| --- | Matapeake, Kent Is. – sea sled | Jan. 1974 | --- | QA-159 |
| Q.A. Co. B.M. #1 | | | | |
| Denny (Farm) (Queen Anne’s County) | | | | |
| --- | Kent Island | Aug. 16, 1952 | --- | QA-68 |
| --- | Love Point | Oct. 25, 1953 | --- | QA-63 |
| --- | Kent Is. | May 17, 1961 | --- | QA-60 |
| --- | N. Kent Island; T. Walter Denny prop. | Aug. 9, 1967 | --- | QA-62 |
| --- | N. Kent Island; T. Walter Denny prop. | Apr. 15, 1969 | 1769-1770 | QA-59 |
| √ | √; Kent Island | Apr. 3, 1970 | --- | QA-73 |

| | | | | |
|--|--|----------------|-----------|--------|
| √ | √; Kent Island; Ches. Bay | June 22, 1970 | --- | QA-72 |
| √ | √; Kent Island; Ches. Bay | Nov. 19, 1970 | 3007-3009 | QA-71 |
| √ | √; Kent Island; Ches. Bay | Jan. 20, 1971 | 3193-3194 | QA-70 |
| √ | √; Kent Island | Mar. 5, 1971 | 3530-3531 | QA-69 |
| √ | √ | Apr. 26, 1971 | 3798-3799 | QA-67 |
| √ | √ | June 4, 1971 | 4022-4023 | QA-66 |
| √ | √ | Aug. 3, 1971 | 4441-4442 | QA-65 |
| √ | √ | Sep. 29, 1971 | --- | QA-61 |
| √ | √ | Feb. 8, 1972 | 5169-5170 | QA-58 |
| √ | √ | Feb. 26, 1973 | 6643-6644 | QA-57 |
| √ | √ | Jun. 11, 1973 | 7311-7312 | QA-56 |
| √ | √ | July 15, 1974 | --- | QA-64 |
| √ | √ | Nov. 19, 1975 | --- | QA-158 |
| Q.A. Co. B.M. #2 | | | | |
| Kent Point (Kent Point (cape) – Claiborne quad) | | | | |
| --- | Kent Island | Sept. 6, 1968 | 1400-1405 | QA-91 |
| --- | √; Kent Island | June 16, 1969 | --- | QA-103 |
| √ | √; Kent Island (panoramic view) | June 16, 1969 | --- | QA-104 |
| √ | √ | Feb. 9, 1970 | --- | QA-102 |
| √ | √; Kent Isl. | Apr. 3, 1970 | --- | QA-101 |
| √ | √; Ches. Bay; Metropolitan Poultry Co. | June 22, 1970 | 2635-2645 | QA-100 |
| √ | √; S. Kent Point | Sept. 15, 1970 | 2818-2831 | QA-98 |
| √ | √; Ches. Bay | Sept. 30, 1970 | 2863-2868 | QA-99 |
| √ | √; Ches. Bay | Dec. 16, 1970 | 3138-3144 | QA-97 |
| √ | √ | Apr. 26, 1971 | 3793-3795 | QA-96 |
| √ | √ | June 4, 1971 | 4020-4021 | QA-94 |
| √ | √ | Aug. 3, 1971 | 4437-4440 | QA-93 |
| √ | √ | Sep. 29, 1971 | --- | QA-92 |
| √ | √ | June 2, 1972 | 5592-5594 | QA-90 |
| √ | √ | July 19, 1972 | --- | QA-95 |
| B.M. #1 NOT clear that this envelope belongs here | √ | Feb. 26, 1973 | --- | QA-89 |
| B.M. #1 NOT clear that this envelope | Kent Island Study #23; also B.M. #1 Kent | June 6, 1973 | 7269-7272 | QA-88 |

| | | | | |
|-----------------------------|--|----------------|-----------------------------------|--------|
| belongs here | Point | | | |
| Q.A. Co. B.M. #3 | Tolson (Farm) (Romancoke (populated place) – Kent Island quad) | | | |
| √ | √; S. Kent Island | June 16, 1969 | --- | QA-154 |
| √ | √ | Feb. 9, 1970 | --- | QA-153 |
| √ | √ | Apr. 3, 1970 | --- | QA-152 |
| √ | √ | Aug. 5, 1970 | --- | QA-151 |
| √ | √; Kent Isl.; Ches. Bay | Nov. 19, 1970 | 3003-3004 | QA-150 |
| √ | √; Ches. Bay | Dec. 16, 1970 | 3151-3152 | QA-149 |
| √ | √ | Jan. 20, 1971 | 3195-3196 | QA-148 |
| √ | √ | Mar. 5, 1971 | 3532-3533 | QA-147 |
| √ | √ | Apr. 26, 1971 | 3796-3797 | QA-146 |
| √ | √ | June 4, 1971 | 4017-4019 | QA-145 |
| √ | √ | Aug. 3, 1971 | 4443-4444 | QA-144 |
| √ | √ | Sept. 29, 1971 | --- | QA-155 |
| √ | √ | June 2, 1972 | 5595-5596 | QA-138 |
| √ | √ | June 28, 1972 | 5647-5649 | QA-137 |
| √ | √ | Feb. 26, 1973 | --- | QA-135 |
| √ | √ | June 4, 1973 | 7263-7265 | QA-136 |
| √ | √ | July 19, 1974 | --- | QA-134 |
| --- | √ | May 6, 1976 | --- | QA-162 |
| Q.A. Co. B.M. #4 | Kent Fort Manor (Kent Fort Manor (populated place) – Claiborne quad) | | | |
| √ | √; Kent Isl. | Jan. 14, 1965 | 675 | QA-87 |
| √ | √; Kent Isl.; Eastern Bay; D. Westergard prop. | Sep. 30, 1970 | --- | QA-86 |
| √ | √; Eastern Bay | Dec. 16, 1970 | 3148-3150 | QA-85 |
| √ | √; Eastern Bay | Jan. 20, 1971 | 3197-3198 | QA-84 |
| √ | √ | Mar. 5, 1971 | 3534-3535 | QA-83 |
| √ | √ | June 4, 1971 | 4029-4030 | QA-82 |
| √ | √ | Aug. 3, 1971 | 4447-4448 (from back of photo) | QA-81 |
| √ | √ | Sept. 29, 1971 | --- | QA-80 |
| √ | √ | Feb. 8, 1972 | 5178-5179 | QA-79 |
| √ | √ | June 2, 1972 | 5598-5599 | QA-78 |
| √ | √ | June 28, 1972 | 5645-5646 | QA-77 |
| √ | √ | Feb. 26, 1973 | --- | QA-76 |
| √ | √ | June 11, 1973 | 7347-7348 | QA-75 |

| | | | | |
|--|---|---------------|-----------|--------|
| √ | √ | July 19, 1974 | --- | QA-74 |
| Q.A. Co. B.M. #5 | | | | |
| Cox Neck (Cox Neck (cape) – Kent Island quad) | | | | |
| √ | √; Cox Creek; G. Walters prop. | Sep. 30, 1970 | --- | QA-55 |
| √ | √; Eastern Bay; Walters prop. | Dec. 16, 1970 | 3134-3137 | QA-54 |
| √ | √ | Jan. 20, 1971 | 3201-3202 | QA-53 |
| √ | √ | Mar. 5, 1971 | 3536-3539 | QA-52 |
| √ | √ | Apr. 26, 1971 | 3800-3802 | QA-51 |
| √ | √ | June 4, 1971 | 4045-4047 | QA-50 |
| √ | √ | Aug. 18, 1971 | 4464-4467 | QA-49 |
| √ | √ | Nov. 2, 1971 | 4676-4677 | QA-48 |
| √ | √ | Feb. 8, 1972 | 5167-5168 | QA-47 |
| √ | √ | June 2, 1972 | 5600-5602 | QA-46 |
| √ | √ | June 29, 1972 | 5656-5658 | QA-45 |
| √ | √ | Mar. 2, 1973 | --- | QA-44 |
| √ | √ | June 26, 1973 | 7548-7549 | QA-43 |
| √ | √ | July 19, 1974 | --- | QA-156 |
| Q.A. Co. B.M. #6 | | | | |
| Piney Point (Piney Neck Point (cape) – Queenstown quad) | | | | |
| √ | N.E. of Piney Neck Pt.; Eastern Bay | Nov. 18, 1970 | --- | QA-122 |
| √ | Piney Neck; Eastern Bay | Jan. 20, 1971 | 3199-3200 | QA-121 |
| √ | Piney Neck | Mar. 5, 1971 | 3540-3544 | QA-120 |
| √ | Piney Neck | Apr. 26, 1971 | 3803-3804 | QA-119 |
| √ | Piney Neck | June 4, 1971 | 4050-4051 | QA-118 |
| √ | Piney Neck | Aug. 13, 1971 | 4455-4456 | QA-117 |
| √ | Piney Neck | Nov. 2, 1971 | 4678-4679 | QA-116 |
| √ | Piney Neck | Feb. 8, 1972 | 5155-5156 | QA-115 |
| √ | Piney Neck | June 29, 1972 | 5659-5661 | QA-114 |
| √ | √ | Mar. 2, 1973 | 6704-6709 | QA-112 |
| √ | √ | June 26, 1973 | 7550-7553 | QA-111 |
| √ | Piney Neck | July 19, 1974 | --- | QA-113 |
| Q.A. Co. B.M. #7 | | | | |
| Bennett Point (Bennett Point (cape) – St. Michaels quad) | | | | |
| --- | Eastern Bay | Apr. 29, 1956 | --- | QA-16 |
| √ | N. of Bennett Pt., Eastern Bay | Nov. 18, 1970 | --- | QA-22 |

| | | | | |
|---|------------------------------|----------------|-----------|--------|
| √ | Bennett Neck; Eastern Bay | Jan. 20, 1971 | 3205-3206 | QA-21 |
| √ | Bennett Neck | Mar. 5, 1971 | 3545-3546 | QA-20 |
| √ | Bennett Neck | Apr. 26, 1971 | 3805-3806 | QA-19 |
| √ | √ | June 4, 1971 | 4048-4049 | QA-18 |
| √ | √ | Aug. 13, 1971 | 4453-4454 | QA-17 |
| √ | Bennett Neck | Nov. 2, 1971 | 4681-4682 | QA-15 |
| √ | Bennett Neck | Feb. 8, 1972 | 5157-5159 | QA-14 |
| √ | √ | Mar. 2, 1973 | 6710-6712 | QA-13 |
| √ | √ | June 26, 1973 | 7554-7555 | QA-12 |
| √ | √ | July 19, 1974 | --- | QA-23 |
| Q.A. Co. | | | | |
| B.M. #8 | | | | |
| Sunny Isle of Kent | | | | |
| (Sunny Isle of Kent (populated place) – Kent Island quad) | | | | |
| √ | √; Ches. Bay | Dec. 16, 1970 | 3145-3147 | QA-133 |
| √ | √; Ches. Bay | Jan. 20, 1971 | 3203-3204 | QA-132 |
| √ | √ | Mar. 5, 1971 | 3547-3549 | QA-131 |
| √ | √ | Apr. 26, 1971 | --- | QA-130 |
| √ | √ | June 4, 1971 | 4027-4028 | QA-129 |
| √ | √ | Aug. 3, 1971 | 4445-4446 | QA-128 |
| √ | √ | Sept. 29, 1971 | --- | QA-127 |
| √ | √ | Feb. 8, 1972 | 5176-5177 | QA-126 |
| √ | √ | Feb. 26, 1973 | --- | QA-125 |
| √ | √ | June 11, 1973 | 7349-7350 | QA-124 |
| --- | √ | Aug. 15, 1974 | --- | QA-123 |
| Q.A. Co. | | | | |
| B.M. #9 | | | | |
| Chesterview | | | | |
| (Queen Anne's County) | | | | |
| √ | √; Chester River | June 4, 1971 | 4024-4026 | QA-31 |
| √ | √ | Aug. 18, 1971 | 4470-4471 | QA-30 |
| √ | √ | Sep. 29, 1971 | --- | QA-29 |
| √ | √ | Nov. 2, 1971 | --- | QA-28 |
| √ | √ | Feb. 8, 1972 | 5171-5173 | QA-27 |
| √ | √ | June 2, 1972 | 5603-5604 | QA-26 |
| √ | √ | June 26, 1973 | 7544-7547 | QA-25 |
| √ | √ | July 15, 1974 | --- | QA-24 |
| --- | √ | May 6, 1976 | --- | QA-161 |
| Q.A. Co. | | | | |
| B.M. #10 | | | | |
| Bay City | | | | |
| (Bay City (populated place) – Kent Island quad) | | | | |
| --- | √; Kent Island; Juckno | Sept. 16, 1961 | --- | QA-157 |
| --- | √ | Mar. 6, 1964 | --- | QA-11 |
| --- | √; Kent Island; | Sep. 27, 1967 | 1274-1275 | QA-10 |

| | | | | |
|------------------------------|--|----------------|--------------------------|--------------|
| | Juckno property | | (from back of photos) | |
| --- | √; N. End. Bay City; Kent Isl. | Mar. 23, 1970 | 3187 | QA-9 |
| √ | √; S. of Bay Bridge | June 4, 1971 | 4031-4032 | QA-8 |
| √ | √ | Aug. 18, 1971 | 4468-4469 | QA-7 |
| √ | √ | Sep. 29, 1971 | --- | QA-6 |
| √ | √ | Feb. 8, 1972 | 5174-75 | QA-5 |
| √ | √ | Oct. 4, 1972 | 6089-95 | QA-4 |
| √ | √ | Feb. 26, 1973 | --- | QA-3 |
| √ | √ | June 11, 1973 | 7308-7310 | QA-2 |
| √ | √ | Aug. 15, 1974 | --- | QA-1 |
| Q.A. Co. B.M. #11 | Tolson (Farm) (Romancoke (populated place) – Kent Island quad) | | | |
| √ | √ | Sept. 29, 1971 | --- | QA-142 |
| √ | √ | June 2, 1972 | 5597 | QA-141 |
| √ | √ | June 28, 1972 | 5650 | QA-140 |
| √ | √ | Feb. 26, 1973 | --- | QA-139 |
| √ | √ | June 4, 1973 | 7266-7268 | QA-143 |
| Q.A. Co. B.M. #12 | Corsica Neck (Corsica Neck (cape) – Langford Creek quad) | | | |
| √ | √ | Nov. 26, 1971 | 4847-4848 | QA-36 |
| √ | √ | Feb. 8, 1972 | 5160-5163 | QA-35 |
| √ | √ | Mar. 2, 1973 | --- | QA-34 |
| √ | √ | June 26, 1973 | 7558-7559 | QA-33 |
| √ | √ | July 15, 1974 | --- | QA-32 |
| Q.A. Co. B.M. #13 | Coursey Point (Coursey Point (cape) – Queenstown quad) | | | |
| √ | √ | Nov. 26, 1971 | 4849-4850 | QA-42 |
| √ | √ | Feb. 8, 1972 | 5164-5166 | QA-41 |
| √ | √ | Mar. 2, 1973 | --- | QA-39, QA-40 |
| √ | √ | June 26, 1973 | 7556-7557 | QA-38 |
| √ | √ | July 15, 1974 | --- | QA-37 |
| Q.A. Co. B.M. #14 | Matapeake (Matapeake State Park (park) – Kent Island quad) | | | |
| --- | √ | Aug. 2, 1949 | --- | QA-105 |
| --- | √ | May 12, 1966 | 989 (from back of photo) | QA-106 |
| √; B.M. #14 A&B | √ | Feb. 26, 1973 | --- | QA-107 |

| | | | | |
|-----------|--------------------|---------------|-----------|--------|
| √ | √ | June 28, 1972 | 5652-5655 | QA-108 |
| B.M. #14B | South Matapeake | Dec. 7, 1973 | --- | QA-109 |
| --- | √ | Apr. 21, 1976 | --- | QA-160 |

APPENDIX A4-9
Shoreline Film Negative and Photo Envelopes for
St. Mary's County, Grouped by Site (Benchmark Number)

SUMMARY:

Number of negative envelopes: 141 Number of film negatives: 398
 Number of photo envelopes: 132 Number of photographs: 384
 Number of slides:

NOTE: A √ in the B.M. # column or in the Location column indicates, respectively, that the B.M. # or the location was included in the label of either or both the film negative and the photograph envelopes.

--- indicates that no relevant information appeared on either envelope

| Table A4-9: Shoreline film negative and photo envelopes for St. Mary's County, Maryland | | | | |
|--|---|----------------------|-----------------------------------|--------------------|
| Benchmark # | Site name | Date of visit | Associated slides | Envelope ID |
| S.M. Co. Miscellaneous | | | | |
| --- | Pt. Lookout | Sept. 15, 1962 | --- | SM-96 |
| --- | Tall Timbers; Rosenbusch | June 25, 1970 | 2663-2666 (photos from slides) | SM-138 |
| S.M. Co. B.M. #1 Far Cry Farm (Chesapeake Bay shore E and slightly N of Far Cry Farm Lane) | | | | |
| --- | √ | Apr. 11, 1959 | --- | SM-55 |
| --- | √; Ches. Bay; Monahan prop.; SEC Proj. #77 | May 7, 1970 | --- | SM-54 |
| √ | √; Ches. Bay; Monahan prop.; SEC Proj. #77 | Aug. 4, 1970 | 2703-2721 | SM-52 |
| √ | √; Ches. Bay; Monahan prop. | Oct. 7, 1970 | --- | SM-38 |
| √ | √; N. of Norris Pond; Ches. Bay; Monahan prop. | Dec. 1, 1970 | 3055-3058 | SM-51 |
| √ | √ | Jan. 22, 1971 | 3233-3235 | SM-50 |
| √ | √ | Mar. 17, 1971 | 3637 | SM-49 |
| √ | √ | Apr. 23, 1971 | --- | SM-48 |
| √ | √ | May 26, 1971 | 3927-3930 | SM-47 |
| √ | √ | July 15, 1971 | 4143-4152 | SM-46 |

| | | | | |
|---|---------------------------------|---------------|-----------|--------------|
| √ | √ | Sep. 29, 1971 | --- | SM-45 |
| √ | √ | Mar. 1, 1972 | --- | SM-44 |
| √ | √ | Aug. 24, 1972 | 5954-5957 | SM-43 |
| √ | √ | Mar. 14, 1973 | --- | SM-41; SM-42 |
| √ | √ | Jun. 12, 1973 | 7321-7329 | SM-40 |
| √ | √ | Aug. 1, 1974 | --- | SM-39 |
| --- | √ | Apr. 19, 1976 | --- | SM-140 |
| √ | √ | June 15, 1977 | --- | SM-53 |
| S.M. Co. | | | | |
| B.M. #2 | | | | |
| Biscoe Creek (Biscoe Creek (bay) – St. George Island quad) | | | | |
| √ | √; Camp Brown; Pot. Riv. | Dec. 1, 1970 | 3044-3046 | SM-11 |
| √ | √; Camp Brown | Jan. 22, 1971 | 3236-3237 | SM-4 |
| √ | √ | Jan. 22, 1971 | 3244-3245 | SM-3 |
| √ | √ | Mar. 17, 1971 | 3638 | SM-10 |
| √ | √ | Apr. 21, 1971 | 3747-3749 | SM-9 |
| √ | √ | May 26, 1971 | 3953 | SM-8 |
| √ | √ | July 16, 1971 | 4328-4330 | SM-7 |
| √ | √ | Mar. 8, 1972 | 5407-5410 | SM-6 |
| √ | √ | July 28, 1972 | --- | SM-5 |
| √ | √ | June 12, 1973 | 7378-7381 | SM-2 |
| √ | √ | Aug. 1, 1974 | --- | SM-1 |
| √ | √ | June 15, 1977 | --- | SM-12 |
| S.M. Co. | | | | |
| B.M. #3 | | | | |
| Drumcliff (Drumcliff (populated place) – Broomes Island quad) | | | | |
| √ | √; Patuxent R.; Bourgeois prop. | Oct. 6, 1970 | 2885-2887 | SM-35 |
| √ | √ | Jan. 22, 1971 | 3230 | SM-37 |
| √ | √ | Mar. 17, 1971 | 3639-3640 | SM-36 |
| √ | √ | Apr. 23, 1971 | --- | SM-34 |
| √ | √ | May 26, 1971 | 3925-3926 | SM-33 |
| √ | √ | June 15, 1971 | 4153 | SM-32 |
| √ | √ | Mar. 1, 1972 | --- | SM-31 |
| √ | √ | Aug. 24, 1972 | 5965-5966 | SM-30 |
| #13 | √ | June 12, 1973 | 7313-7320 | SM-29 |
| √ | √ | Aug. 5, 1974 | --- | SM-28 |
| S.M. Co. | | | | |
| B.M. #4 | | | | |
| N of Carroll Pond (Carroll Pond (lake) – Point No Point quad) | | | | |
| √ | √; Ches. Bay | Oct. 7, 1970 | --- | SM-23 |
| √ | √; Ches. Bay | Dec. 1, 1970 | 3040-3041 | SM-22 |

| | | | | |
|-----|--------------|---------------|-----------|--------|
| √ | √ | Jan. 22, 1971 | 3238-3239 | SM-21 |
| √ | √ | Mar. 17, 1971 | --- | SM-20 |
| √ | √ | Apr. 21, 1971 | 3750-3751 | SM-19 |
| √ | √ | May 26, 1971 | 3950-3951 | SM-18 |
| √ | √ | July 16, 1971 | --- | SM-17 |
| √ | √ | Sep. 29, 1971 | --- | SM-16 |
| √ | √ | Mar. 1, 1972 | --- | SM-15 |
| √ | Carroll Pond | June 12, 1973 | 7330-7334 | SM-14 |
| √ | √ | Aug. 1, 1974 | --- | SM-13 |
| --- | √ | Apr. 19, 1976 | --- | SM-139 |
| √ | √ | June 15, 1977 | --- | SM-80 |

| S.M. Co. B.M. #5 | St. Clarence Cr. (St. Clarence Creek (bay) – Point No Point quad) | | | |
|-----------------------------|---|---------------|-----------|----------------|
| √ | √; Water Ck. & Ches. Bay | Oct. 7, 1970 | --- | SM-133 |
| √ | √; Ches. Bay | Dec. 1, 1970 | 3048-3052 | SM-132 |
| √ | √ | Jan. 22, 1971 | 3240-3241 | SM-131 |
| √ | √ | Mar. 17, 1971 | --- | SM-130 |
| √ | √ | Apr. 21, 1971 | 3752-3755 | SM-129 |
| √ | √ | May 26, 1971 | 3955 | SM-128 |
| √ | √ | Mar. 1, 1972 | --- | SM-127 |
| √ | √ | Mar. 8, 1972 | 5404-5406 | SM-126 |
| √ | √ | Aug. 24, 1972 | 5951-5953 | SM-125 |
| √ | √ | June 12, 1973 | 7337-7339 | SM-124 |
| √ | √ | Aug. 1, 1974 | --- | SM-122; SM-123 |
| √ | √ | June 14, 1977 | --- | SM-134 |

| S.M. Co. B.M. #6 | Pt. No Pt. (Point No Point (cape) – Point No Point quad) | | | |
|-----------------------------|--|---------------|-----------|--------|
| √ | √; Ches. Bay | Oct. 7, 1970 | --- | SM-108 |
| √ | √; Ches. Bay | Dec. 1, 1970 | 3039 | SM-107 |
| √ | √ | Jan. 22, 1971 | 3242-3243 | SM-105 |
| √ | √ | Mar. 17, 1971 | --- | SM-104 |
| √ | √ | Apr. 21, 1971 | 3756-3758 | SM-103 |
| √ | √ | May 26, 1971 | 3952 | SM-102 |
| √ | √ | Mar. 1, 1972 | --- | SM-106 |
| √ | √ | June 12, 1973 | 7335-7336 | SM-101 |
| √ | √ | Aug. 1, 1974 | --- | SM-100 |
| √ | √ | June 14, 1977 | --- | SM-109 |

| S.M. Co. B.M. #7 | Pt. Lookout - S (Point Lookout (cape) – Point Lookout quad) | | | |
|-----------------------------|---|--------------|-----|-------|
| √ | √; S of | Oct. 7, 1970 | --- | SM-91 |

| | | | | |
|--|-----------------------------------|----------------|-----------|--------|
| | causeway; Ches. Bay | | | |
| √ | √; S of causeway; Ches. Bay | Dec. 1, 1970 | 3042-3043 | SM-90 |
| √ | √; S of causeway | Jan. 22, 1971 | 3244-3245 | SM-89 |
| √ | √; S of causeway | Mar. 17, 1971 | 3641 | SM-88 |
| √ | √ | Apr. 21, 1971 | 3759-3760 | SM-87 |
| √ | √ | May 26, 1971 | 3949 | SM-86 |
| √ | Pt. Lookout | July 16, 1971 | 4326-4327 | SM-81 |
| B.M. #7 & 8 | Pt. Lookout | Sept. 29, 1971 | --- | SM-95 |
| √ | √ | Sept. 30, 1971 | --- | SM-85 |
| √ | √ | Mar. 8, 1972 | --- | SM-84 |
| √ | √ | June 12, 1973 | 7340-7344 | SM-83 |
| √ | √ | Aug. 1, 1974 | --- | SM-82 |
| --- | Pt. Lookout; structures | Aug. 1, 1974 | --- | SM-92 |
| S.M. Co. B.M. #8 | | | | |
| Pt. Lookout - N (Point Lookout (cape) – Point Lookout quad) | | | | |
| √ | √; N of causeway; Ches. Bay | Oct. 7, 1970 | --- | SM-78 |
| √ | √; N of causeway; Ches. Bay | Dec. 1, 1970 | 3053-3054 | SM-77 |
| √ | √; N of causeway | Jan. 22, 1971 | 3246-3247 | SM-70 |
| √ | √; N of causeway | Mar. 17, 1971 | 3642 | SM-76 |
| √ | √ | Apr. 21, 1971 | 3761-3762 | SM-75 |
| √ | √ | May 26, 1971 | 3954 | SM-74 |
| √ | Pt. Lookout | July 16, 1971 | 4326-4327 | SM-73 |
| B.M. #7 & 8 | Pt. Lookout | Sept. 29, 1971 | --- | SM-95 |
| √ | √ | Sept. 30, 1971 | --- | SM-69 |
| √ | √ | Mar. 8, 1972 | --- | SM-72 |
| √ | √ | June 12, 1973 | 7377 | SM-71 |
| √ | √ | Aug. 1, 1974 | --- | SM-68 |
| --- | √ | Apr. 19, 1976 | --- | SM-141 |
| √ | √; N of causeway | June 15, 1977 | --- | SM-79 |
| S.M. Co. | | | | |
| Riverside | | | | |

| | | | | |
|------------------------------|---|---------------|-----------|--------------|
| B.M. #9 | (St. Mary's County) | | | |
| √ | √; Potomac R. | Dec. 15, 1970 | 3154-3156 | SM-120 |
| √ | √; Potomac R. | Jan. 22, 1971 | 3248-3249 | SM-119 |
| √ | √ | Mar. 17, 1971 | --- | SM-118 |
| √ | √ | Apr. 21, 1971 | 3763-3764 | SM-117 |
| √ | √ | July 16, 1971 | 4323-4325 | SM-116 |
| √ | √ | Mar. 8, 1972 | --- | SM-115 |
| √ | √ | June 13, 1973 | 7386-7387 | SM-114 |
| √ | √ | July 26, 1974 | --- | SM-113 |
| √ | √ | June 14, 1977 | --- | SM-121 |
| S.M. Co. B.M. #10 | Pt. Lookout - W (Point Lookout (cape) – Point Lookout quad) | | | |
| √ | Pt. Lookout | Nov. 30, 1971 | 4866-4867 | SM-93 |
| √ | √ | Mar. 8, 1972 | 5411-5412 | SM-99 |
| √ | √ | June 12, 1973 | 7345-7346 | SM-97 |
| √ | √ | Aug. 1, 1974 | --- | SM-98 |
| √ | Pt. Lookout | June 15, 1977 | --- | SM-94 |
| S.M. Co. B.M. #11 | Kitts Point (Kitts Point (cape) – St. George Island quad) | | | |
| √ | √ | Nov. 30, 1971 | 4868-4869 | SM-61 |
| √ | √ | Mar. 8, 1972 | --- | SM-59, SM-60 |
| √ | √ | June 28, 1972 | --- | SM-58 |
| √ | √ | June 13, 1973 | 7382-7383 | SM-57 |
| √ | √ | Aug. 1, 1974 | --- | SM-56 |
| √ | √ | June 14, 1977 | --- | SM-62 |
| S.M. Co. B.M. #12 | South Potomac Shores (Potomac River shore SW of bend in Tall Timbers Road; see field notes) | | | |
| √ | √ | Nov. 30, 1971 | 4870-4872 | SM-136 |
| √ | √ | June 13, 1973 | 7384-7385 | SM-135 |
| --- | √ | Apr. 20, 1976 | --- | SM-142 |
| √ | √ | June 14, 1977 | --- | SM-137 |
| S.M. Co. B.M. #13 | Posey's Bluff (Posey's Bluff (cliff) – St. Clements Island quad) | | | |
| √ | √ | Mar. 8, 1972 | --- | SM-112 |
| B.M. #2 | √ | June 13, 1973 | 7388-7389 | SM-110 |
| √ | √ | No date | --- | SM-111 |
| S.M. Co. B.M. #14 | Colton Point (Colton Point (cape) – Stratford Hall quad) | | | |
| √ | √; Colton Point | Dec. 2, 1971 | 4858-4860 | SM-27 |

| | | | | |
|--|--------|---------------|-----------|--------------|
| | (N.W.) | | | |
| √ | √ | Mar. 8, 1972 | 5334-5336 | SM-26 |
| √ | √ | June 13, 1973 | 7392-7396 | SM-25 |
| √ | √ | July 26, 1974 | --- | SM-24 |
| S.M. Co. | | | | |
| B.M. #15 | | | | |
| Newton Neck | | | | |
| (Newtown Neck (cape) – St. Clements Island quad) | | | | |
| √ | √ | Dec. 2, 1971 | 4861-4863 | SM-67 |
| √ | √ | Mar. 8, 1972 | 5333 | SM-65, SM-66 |
| √ | √ | June 13, 1973 | 7390-7391 | SM-64 |
| √ | √ | July 26, 1974 | --- | SM-63 |

APPENDIX A4-10

**Shoreline Film Negative and Photo Envelopes for
Somerset County, Grouped by Site (Benchmark Number)**

SUMMARY:

| | |
|----------------------------------|-------------------------------|
| Number of negative envelopes: 39 | Number of film negatives: 264 |
| Number of photo envelopes: 38 | Number of photographs: 257 |
| Number of slides: | |

NOTE: A √ in the B.M. # column or in the Location column indicates, respectively, that the B.M. # or the location was included in the label of either or both the film negative and the photograph envelopes.

--- indicates that no relevant information appeared on either envelope

| Table A4-10: Shoreline film negative and photo envelopes for Somerset County, Maryland | | | | |
|---|---|----------------------|-------------------------------|--------------------|
| Benchmark # | Site name | Date of visit | Associated slides | Envelope ID |
| Somerset Co. Miscellaneous | | | | |
| --- | Deal Island | Oct. 13, 1955 | ... | SO-38 |
| --- | Janes Island | Feb. 24, 1961 | --- | SO-15 |
| --- | Janes Island | May 27, 1964 | 596-597 (from back of photos) | SO-14 |
| --- | Janes Island | July 22, 1969 | 2037-2051 | SO-6 |
| --- | Janes Island (break in spit); Tangier Sound | Nov. 23, 1970 | --- | SO-13 |
| B.M. #7-12 | Janes Island | Oct. 13, 1971 | --- | SO-10 |
| --- | Janes Island; Crisfield | Jan. 26, 1972 | 5117-5148 | SO-3 |
| --- | Deal Island | June 8, 1976 | --- | SO-39, SO-40 |
| Somerset Co. B.M. #1 | | | | |
| Janes Island (Janes Island (island) – Terrapin Sand Point quad) | | | | |
| √ | √ | Apr. 21, 1970 | --- | SO-8 |
| √ | √; Tangier Sound | Sept. 22, 1970 | --- | SO-7 |
| √ | √; Tangier Sound | Nov. 23, 1970 | --- | SO-5 |
| √ | √ | Mar. 18, 1971 | 3643-3649 | SO-4 |
| √ | √ | Apr. 29, 1971 | 3821-3825 | SO-2 |
| B.M. #1, 5, 6, 7 | √ | Sept. 24, 1971 | 4562-4575; 4607-4620 | SO-9 |

| | | | | |
|---------------------------------|--|----------------|------------|-------|
| B.M. #1, 5, 6, 7 | √ | Mar. 28, 1972 | 5472-5484 | SO-1 |
| B.M. #1, 5, 6, 7 | √ | May 12, 1972 | 5523-5548; | SO-11 |
| | | | 5558-5560 | SO-12 |
| | | | | |
| Somerset Co. B.M. #2 | Prickly Point (Prickly Point (cape) – Marion quad) | | | |
| --- | √; Goose Creek; Ely property | Sept. 24, 1970 | --- | SO-20 |
| √ | √; Tangier Sound | Nov. 23, 1970 | 2996-2999 | SO-18 |
| √ | √ | Mar. 18, 1971 | 3650-3652 | SO-17 |
| √ | √ | Aug. 25, 1971 | --- | SO-16 |
| √ | Deal Island | May 19, 1977 | --- | SO-19 |
| | | | | |
| Somerset Co. B.M. #3 | Wenona (Wenona (populated place) – Deal Island quad) | | | |
| --- | Deale Island, below Wenona, Tangier Sound | Sept. 24, 1970 | --- | SO-35 |
| √ | √; Deal Island, Gier Sound | Nov. 23, 1970 | 3014-3017 | SO-34 |
| √ | √ | Mar. 18, 1971 | 3653-3656 | SO-33 |
| √ | √; Deal Island | Apr. 29, 1971 | 3826-3827 | SO-30 |
| √ | √ | Aug. 25, 1971 | 4490-4491 | SO-32 |
| √ | √ | Aug. 15, 1974 | --- | SO-31 |
| √ | √ | Oct. 11, 1976 | --- | SO-22 |
| | | | | |
| Somerset Co. B.M. #4 | St. Thomas Church (St. John's Methodist Episcopal Church and Joshua Thomas Chapel) | | | |
| √ | Deal Island; W of Thomas Church; Tangier Sound | Sept. 24, 1970 | --- | SO-27 |
| √ | Deal Island; W of Thomas Church; Gier Sound | Nov. 23, 1970 | 3000-3002 | SO-26 |
| √ | Deal Island; W of Thomas Church | Mar. 18, 1971 | 3657-3658 | SO-25 |
| √ | √; Deal Island | Apr. 29, 1971 | 3828-3829 | SO-23 |
| √ | √ | Aug. 25, 1971 | 4472-4473 | SO-24 |
| √ | √ | Aug. 15, 1974 | --- | SO-21 |

| | | | | |
|--|-------------|----------------|-------------------------|-------|
| √ | √ | Oct. 11, 1976 | --- | SO-28 |
| √ | Deal Island | May 19, 1977 | --- | SO-29 |
| Somerset Co. B.M. #5 | | | | |
| Janes Island (Janes Island (island) – Terrapin Sand Point quad) | | | | |
| B.M. #1, 5, 6, 7 | √ | Sept. 24, 1971 | 4562-4575; 4607-4620 | SO-9 |
| B.M. #1, 5, 6, 7 | √ | Mar. 28, 1972 | 5472-5484 | SO-1 |
| B.M. #1, 5, 6, 7 | √ | May 12, 1972 | 5523-5548; 5558-5560 | SO-11 |
| | | | --- | SO-12 |
| Somerset Co. B.M. #6 | | | | |
| Janes Island (Janes Island (island) – Terrapin Sand Point quad) | | | | |
| B.M. #1, 5, 6, 7 | √ | Sept. 24, 1971 | 4562-4575; 4607-4620 | SO-9 |
| B.M. #1, 5, 6, 7 | √ | Mar. 28, 1972 | 5472-5484 | SO-1 |
| B.M. #1, 5, 6, 7 | √ | May 12, 1972 | 5523-5548; 5558-5560 | SO-11 |
| | | | --- | SO-12 |
| Somerset Co. B.M. #7 | | | | |
| Janes Island (Janes Island (island) – Terrapin Sand Point quad) | | | | |
| B.M. #1, 5, 6, 7 | √ | Sept. 24, 1971 | 4562-4575; 4607-4620 | SO-9 |
| B.M. #1, 5, 6, 7 | √ | Mar. 28, 1972 | 5472-5484 | SO-1 |
| B.M. #1, 5, 6, 7 | √ | May 12, 1972 | 5523-5548; 5558-5560 | SO-11 |
| | | | --- | SO-12 |
| Somerset Co. B.M. #8 | | | | |
| Dames Quarter (Dames Quarter (populated place) – Deal Island quad) | | | | |
| √ | √ | Oct. 11, 1976 | --- | SO-36 |
| √ | √ | May 19, 1977 | --- | SO-37 |

APPENDIX A4-11

**Shoreline Film Negative and Photo Envelopes for
Talbot County, Grouped by Site (Benchmark Number)**

SUMMARY:

| | |
|----------------------------------|-------------------------------|
| Number of negative envelopes: 95 | Number of film negatives: 343 |
| Number of photo envelopes: 1 | Number of photographs: 1 |
| Number of slides: | |

NOTE: A √ in the B.M. # column or in the Location column indicates, respectively, that the B.M. # or the location was included in the label of either or both the film negative and the photograph envelopes.

--- indicates that no relevant information appeared on either envelope

NOTE: The negatives envelope originally labeled TA-68 was misfiled under Talbot Co. and subsequently relabeled QA-158. There are, therefore, no negative or positive envelopes currently labeled TA-68.

| Table A4-11: Shoreline film negative and photo envelopes for Talbot County, Maryland | | | | |
|---|---|----------------------|--------------------------|--------------------|
| Benchmark # | Site name | Date of visit | Associated slides | Envelope ID |
| Talbot Co. Miscellaneous | | | | |
| --- | Poplar Island; Chesapeake Bay; aerial | Mar. 9, 1966 | | TA-36 |
| --- | S. Tilghman Is. | Mar. 18, 1971 | --- | TA-57 |
| --- | Poplar Island | May 2, 1973 | | TA-30 |
| --- | N of Ragged Island | May 22, 1977 | --- | TA-94 |
| Talbot Co. Poplar Island (Poplar Island (island) – Deale quad) | | | | |
| √ | √; S. segment Poplar Island; panoramic view | June 17, 1969 | --- | TA-35 |
| B.M. # 1, 4 | √; Ches. Bay | Nov. 2, 1970 | 2939-2949 | TA-32 |
| B.M. # 1, 3, 4 | √ | May 5, 1971 | 3852-3857 | TA-34 |
| B.M. # 1, 3 | √; “C” | Aug. 18, 1971 | 4498-4500 | TA-33 |
| B.M. # 1, 3, 4 | √ | Mar. 28, 1972 | 5451-5455 | TA-31 |
| B.M. # 1, 3, 4 | √ | July 17, 1974 | --- | TA-28; TA-29 |
| Talbot Co. Tilghman Island | | | | |

| B.M. #2 | (Tilghman Island (island) – Tilghman quad) | | | |
|---------|--|----------------|-----------|-------|
| --- | √; N. of Navy Tower | Sept. 25, 1964 | --- | TA-84 |
| --- | √ | Oct. 13, 1964 | --- | TA-83 |
| --- | √; Nat'l ResourCHs Inst.; Tilghman Is. | Mar. 24, 1965 | --- | TA-82 |
| --- | √; Nat'l ResourCHs Inst.; Blackwalnut Pt. | Sept. 28, 1965 | --- | TA-85 |
| --- | √; Blackwalnut Pt. | Apr. 27, 1966 | --- | TA-80 |
| --- | √; NRI; Tilghman Is. | Aug. 2, 1966 | --- | TA-79 |
| | √; Navy Tower | | | TA-81 |
| --- | √; NRI; S. Tilghman Is. | Sept. 23, 1966 | --- | TA-78 |
| --- | √; NRI; S. Tilghman Is. | Jan. 23, 1967 | --- | TA-77 |
| --- | √; NRI; S. Tilghman Is. | Mar. 10, 1967 | --- | TA-76 |
| --- | √; NRI; S. Tilghman Is. | June 23, 1967 | --- | TA-74 |
| --- | √; NRI; S. Tilghman Is. | July 11, 1967 | --- | TA-73 |
| --- | √; NRI; S. Tilghman Is. | July 19, 1967 | --- | TA-72 |
| --- | √; NRI; S. Tilghman Is. | July 21, 1967 | --- | TA-71 |
| --- | √; NRI; S. Tilghman Is. | Aug. 25, 1967 | --- | TA-70 |
| --- | √; NRI; S. Tilghman Is. | Sept. 26, 1967 | --- | TA-75 |
| --- | √; S. Tilghman Is. | Mar. 21, 1969 | 1714-1718 | TA-67 |
| --- | √; NRI; S. Tilghman Is. | June 17, 1969 | 1909 | TA-66 |
| √ | √; N. end NRI bulkhead | Aug. 8, 1969 | 2066-2067 | TA-65 |
| √ | √; S. Tilghman Is. | Feb. 26, 1970 | 3113-3121 | TA-64 |
| √ | √; S. Tilghman Is. | Mar. 10, 1970 | --- | TA-63 |
| √ | √; Chesapeake | May 11, 1970 | --- | TA-62 |

| | | | | |
|---|--|-----------------|-----------|--------------|
| | Bay | | | |
| √ | √; S. Tilghman Is. | Sept. 14, 1970 | 2814-2817 | TA-61 |
| √ | √; Chesapeake Bay | Nov. 18, 1970 | --- | TA-60 |
| √ | √ | Jan. 20, 1971 | 3207 | TA-59 |
| √ | √ | Mar. 12, 1971 | 3607-3619 | TA-58 |
| √ | √ | June 8, 1971 | 4052-4054 | TA-56 |
| √ | √ | June 23, 1971 | 4109-4111 | TA-54 |
| √ | √ | Aug. 25, 1971 | 4480-4482 | TA-53 |
| √ | √ | Nov. 11, 1971 | 4829-4830 | TA-50 |
| √ | √ | Mar. 9, 1972 | 5337-5341 | TA-49 |
| √ | √ | Oct. 4, 1972 | 6075-6088 | TA-48 |
| √ | √ | Feb. 28, 1973 | --- | TA-47 |
| √ | √ | [Nov. 19, 1975] | --- | TA-69 |
| --- | √; S. Tilghman Is. | May 20, 1976 | --- | TA-95 |
| √ | √ | May 22, 1977 | --- | TA-51 |
| Talbot Co. B.M. #3 Poplar Island (Poplar Island (island) – Deale quad) | | | | |
| B.M. # 1, 3, 4 | √ | May 5, 1971 | 3852-3857 | TA-34 |
| B.M. # 1, 3 | √ | Aug. 18, 1971 | 4501-4503 | TA-33 |
| B.M. # 1, 3, 4 | √ | Mar. 28, 1972 | 5451-5455 | TA-31 |
| B.M. # 1, 3, 4 | √ | July 17, 1974 | --- | TA-28; TA-29 |
| Talbot Co. B.M. #4 Poplar Island (Poplar Island (island) – Deale quad) | | | | |
| B.M. # 1, 4 | √; Ches. Bay | Nov. 2, 1970 | 2939-2949 | TA-32 |
| B.M. # 1, 3, 4 | √ | May 5, 1971 | 3852-3857 | TA-34 |
| B.M. # 1, 3, 4 | √ | Mar. 28, 1972 | 5451-5455 | TA-31 |
| B.M. # 1, 3, 4 | √ | July 17, 1974 | --- | TA-28; TA-29 |
| Talbot Co. B.M. #5 Rich Neck (Rich Neck (cape) – Claiborne quad) | | | | |
| √ | √; S. of Tilghman Neck; Eastern Bay; old through cut | Nov. 18, 1970 | --- | TA-46 |
| √ | √; S. of Tilghman Pt. | Jan. 20, 1971 | 3209-3210 | TA-45 |
| √ | √; S. of Tilghman Pt. | Mar. 12, 1971 | 3604-3606 | TA-44 |
| √ | √ | June 8, 1971 | 4083-4084 | TA-43 |

| | | | | |
|--|--|---------------|-------------|------------|
| √ | √ | Aug. 25, 1971 | 4485-4486 | TA-42 |
| √ | √ | Nov. 11, 1971 | --- | TA-38 |
| √ | √ | July 6, 1972 | 5734-5735 | TA-37 |
| √ | √ | Feb. 28 1973 | --- | TA-41 |
| Talbot Co. B.M. #6 Coaches Island (Coaches Island (island) – Claiborne quad) | | | | |
| √ | √ | May 5, 1971 | 3858-3860 | TA-12 |
| √ | √ | Aug. 18, 1971 | 4504-4505 | TA-11 |
| √ | √ | Mar. 28, 1972 | 5457 & 5459 | TA-10 |
| √ | √ | July 17, 1974 | --- | TA-8; TA-9 |
| Talbot Co. B.M. #7 Pawpaw Cove (Pawpaw Cove (bay) – Tilghman quad) | | | | |
| --- | Paw Paw | Oct. 28, 1961 | --- | TA-27 |
| √ | Tilghman Isl., S. of Pawpaw Cove | June 8, 1971 | 4055 & 4085 | TA-55 |
| √ | Tilghman Isl. (should this be here?) | Aug. 25, 1971 | 4496-4497 | TA-52 |
| √ | √ | Feb. 28, 1973 | --- | TA-26 |
| Talbot Co. B.M. #8 Nelson Point (Nelson Point (cape) – Tilghman quad) | | | | |
| --- | √ | Mar. 24, 1965 | --- | TA-25 |
| √ | √; Merlees Prop. | Aug. 25, 1971 | 4459 | TA-24 |
| √ | √ | Mar. 9, 1972 | 5347-5348 | TA-23 |
| √ | √ | Feb. 28, 1973 | 6648-6649 | TA-22 |
| Talbot Co. B.M. #9 Deep Neck (Deep Neck (cape) – Oxford quad) | | | | |
| √ | √ | Aug. 25, 1971 | 4487 | TA-17 |
| Talbot Co. B.M. #10 Benoni Point (Benoni Point (cape) – Oxford quad) | | | | |
| √ (added later?) | √; Hoffman - Crystals | Nov. 14, 1959 | --- | TA-7 |
| --- | √ | Dec. 16, 1965 | --- | TA-1 |
| √ | √ | Aug. 25, 1971 | 4483-4484 | TA-6 |
| √ | √ | Nov. 11, 1971 | --- | TA-5 |
| √ | √ | Mar. 9, 1972 | 5351-5352 | TA-3 |
| √ | √ | July 6, 1972 | 5351-5353 | TA-4 |
| √ | √ | July 6, 1972 | 5732-5733 | TA-2 |

| | | | | |
|----------------------------------|--|---------------|-----------|-------|
| Talbot Co. B.M. #12 | Long Point (Talbot County) | | | |
| √ | √ | June 8, 1971 | 4086-4087 | TA-21 |
| √ | √ | Mar. 9, 1972 | 5342-5344 | TA-20 |
| √ | √ | Feb. 28, 1973 | --- | TA-19 |
| Talbot Co. B.M. #13 | Narrows of Rich Neck (Rich Neck (cape) – Claiborne quad) | | | |
| √ | √ | Aug. 25, 1971 | 4477 | TA-40 |
| √ | √ | Feb. 28, 1973 | --- | TA-39 |
| Talbot Co. B.M. #15 | Wades Point (Wades Point (cape) – Claiborne quad) | | | |
| ---; Eastern Shore Field Trip | √ | Apr. 30, 1964 | --- | TA-90 |
| --- | √ | Aug. 8, 1965 | --- | TA-91 |
| --- | √ | Nov 18, 1970 | --- | TA-92 |
| √ | √ | Aug. 25, 1971 | 4474-4476 | TA-89 |
| √ | √ | Mar. 9, 1972 | 5345-5346 | TA-88 |
| √ | √ | July 6, 1972 | 5736-5738 | TA-87 |
| √ | √ | Feb. 28, 1973 | --- | TA-86 |
| √ | √ | May 22, 1977 | --- | TA-93 |
| Talbot Co. B.M. #16 | Deep Neck Point (Deep Neck Point (cape) – Oxford quad) | | | |
| √ | √ | Aug. 25, 1971 | 4488-4489 | TA-18 |
| √ | √ | Nov. 11, 1971 | --- | TA-16 |
| √ | √ | Mar. 9, 1972 | 5349-5350 | TA-15 |
| √ | Deep Neck | July 6, 1972 | 5730-5731 | TA-14 |
| √ | Deep Neck | Feb. 28, 1973 | 6650-6651 | TA-13 |

APPENDIX A4-12

**Shoreline Film Negative and Photo Envelopes for
Worcester County, Summary Information**

SUMMARY:

Number of negative envelopes: 106

Number of photo envelopes: 0

Number of slides:

Number of film negatives: 482

Number of photographs: 0

APPENDIX A4-13

Storage Boxes for 35-mm Shoreline Slides

| Table A4-13: Storage boxes for 35-mm shoreline (shore erosion) slides, from box labels | | | |
|---|---------------------------|----------------------------|---------------------------|
| “Shore Erosion” box | Slide number range | “Shore Erosion” box | Slide number range |
| #1 | 1-300 | #26 | 7,500-7,799 |
| #2 | 301-600 | #27 | 7,800-8,099 |
| #3 | 601-900 | #28 | 8,100-8,399 |
| #4 | 901-1,200 | #29 | Box 29 |
| #5 | 1,201-1,500 | #30 | 8,700-9,000 |
| #6 | 1,501-1,800 | #31 | 9,001-9,300 |
| #7 | 1,801-2,100 | #32 | 9,301-9,600 |
| #8 | 2,100-2,400 | #33 | 9,601-9,900 |
| #9 | 2,401-2,700 | #34 | 9,901-10,200 |
| #10 | 2,701-3,000 | #35 | 10,201-10,500 |
| #11 | 3,001-3,300 | #36 | 10,501-10,800 |
| #12 | 3,301-3,600 | #37 | Box 37 |
| #13 | 3,601-3,900 | #38 | -11,399 |
| #14 | 3,901-4,200 | #39 | 11,401-11,699 |
| #15 | 4,201-4,500 | #40 | 11,700-11,995 |
| #16 | 4,501-4,800 | #41 | 11,996-12,494 |
| #17 | 4,801-5,100 | #42 | missing |
| #18 | 5,101-5,400 | #43 | Box 43 |
| #19 | 5,401-5,700 | | |
| #20 | 5,701-6,000 | | |
| #21 | 6,001-6,300 | | |
| #22 | 6,300-6,600 | | |
| #23 | 6,601-6,899 | | |
| #24 | 6,900-7,199 | | |
| #25 | 7,200-7,499 | | |

APPENDIX A4-14

NGGDPP METADATA FORM

*Historical Photographs of Tidal Shorelines,
Maryland, 1948-1977*

MGS Collection ID: 23
Original NGGDPP ID: [none]
ScienceBase ID: 4f4e4a94e4b07f02db658da3

Sources of Information:

- Information typed, stamped and/or handwritten on envelopes containing the shoreline photographs or associated film negatives and stored in the internal MGS Microsoft Access database DataPreservation.mdb (table tblSLPhotos)
- USGS *ScienceBase Catalog* (collection ID)
- 2006 *Implementation Plan for the National Geological and Geophysical Data Preservation Program*, Appendix 2 (data type)
[<http://datapreservation.usgs.gov/docs/2006DataPreservation.pdf>]
- USGS Geographic Names Information System (GNIS) website
[<http://geonames.usgs.gov/domestic/>] (geographic coordinates)
- Certain “Related Materials” described below

CollectionID

Definition: NGGDPP collection identification number

Value: “4f4e4a94e4b07f02db658da3”

(*ScienceBase Catalog* ID for the collection *Historical Photographs of Tidal Shorelines, Maryland, 1948-1977*)

Source: Generated by the *ScienceBase Catalog* upon submittal of a collection inventory for *Historical Photographs of Tidal Shorelines, Maryland, 1948-1977*; stored internally in DataPreservation.mdb – tblCollection – field “ScienceBaseID”

Title

Definition: Official, human-readable title for individual record, used in listings & search results (short, distinctive) – mandatory

Value: Envelope XXX-###, where

XXX = 2- or 3-character abbreviation of a Maryland county

= 3-digit integer, beginning with 001 for each county

| County name | County abbreviation |
|--------------|---------------------|
| Anne Arundel | CAL |
| Baltimore | BA |
| Calvert | CAL |
| Cecil | CE |

| | |
|--------------|----|
| Charles | CH |
| Dorchester | DO |
| Kent | KE |
| Queen Anne's | QA |
| St. Mary's | SM |
| Somerset | SO |
| Talbot | TA |
| Worcester | WO |

Source: Envelope identification number, handwritten in pencil in the lower left corner of each photograph envelope and film negative envelope (associated film negative and photograph envelopes have the same Envelope identification number)

Example: Envelope CAL-072 (the 72nd envelope for Anne Arundel County)

Alternate Title

Definition: Additional title identifiers for individual record (e.g., for further identification by other Web service interfaces); textual titles or specific sample IDs used by collection – optional

Value: the value stored in key field *SLPhotoEnvelopeID* (caption = *Envelope ID*)

Source: DataPreservation.mdb => tblSLPhotos

Example: SL Photo Envelope ID 76

Abstract

Definition: Human-readable description of individual record, used to help determine nature of underlying physical data resource; contains much information about data resource – mandatory

Value: “Envelope(s) of shoreline photographs ([# of photographs]) and associated film negatives ([# of negatives]), taken [date of photography] at [site location], [county name] County, Maryland”

Source: A concatenation of information stored in two tables in the Data Preservation database – tblSLPhotos (fields *N_Photos*, *N_Negatives*, *EnvelopeDate*, *SiteLocation*) and tblCounty (field *CountyName*) – linked by text

Example: “Envelope(s) of shoreline photographs (2) and associated film negatives (2), taken 11/2/1971 at Bennett Point, Queen Annes County, Maryland”

Data Type

Definition: A controlled vocabulary of one or more data types - mandatory

Value: “Photograph”

Source: Determined by MGS, based on the list of data types provided in Appendix 2 of the 2006 NGGDPP *Implementation Plan*

SupplementalInformation

Definition: Information on how to access physical data represented by metadata record (e.g., general for entire collection, such as URL, or specific reference to online resource, like ordering system with specific ID) - mandatory

Value: “Contact the MGS curator at (410) 554-5500 for additional information.”

Source: n/a

Coordinates

Definition: Geographic coordinates (longitude, latitude), in decimal degrees – mandatory

Value: (-)decimal longitude, decimal latitude

The accuracy of the information contained in this field depends on the source of information available for a particular site. Here are the various methods employed, from most to least accurate:

1. The original researchers maintained a file folder for each site, which generally included a copy of part of a 1:24,000-scale topographic map with the site location marked. For the few sites with an extant folder, the curator extracted approximate coordinates from GNIS by matching the location on the field map with the same location on a topographic map displayed in GNIS.
2. The name of the site locality coincided with the name of a feature recognized by GNIS, and the curator recorded the coordinates associated with that feature (e.g., Grove Point, Cecil County). The accuracy of these locations varies by type of feature. For example, a cape is more exactly pinpointed than is a body of water or an island. (If the site name was specific, but not recognized by GNIS, an independent Internet search sometimes revealed the approximate site location; GNIS then provided coordinates of a nearby feature.)
3. In the relatively few instances where a geographic feature could not be clearly found, the centroid of the county in which the site was located was recorded.

Sources: labels typed or handwritten on photo/film negative envelopes; information contained in original file folders (see “Related Materials”); Geographic Names Information System (GNIS); various Internet websites, in searching for place names not recognized by GNIS

| County | Latitude (DMS) | Longitude (DMS) | Latitude (dec. deg.) | Longitude (dec. deg.) |
|----------------|-----------------------|------------------------|-----------------------------|------------------------------|
| Allegany | 394000N | 0783959W | 39.666667 | -78.666389 |
| Anne Arundel | 390000N | 0763659W | 39. | -76.616389 |
| Baltimore | 392800N | 0763859W | 39.466667 | -76.649722 |
| Baltimore City | 391725N | 0763644W | 39.290278 | -76.612222 |
| Calvert | 383300N | 0763459W | 38.55 | -76.583056 |
| Caroline | 385200N | 0754959W | 38.866667 | -75.833056 |
| Carroll | 393300N | 0770059W | 39.55 | -77.016389 |
| Cecil | 393400N | 0755659W | 39.566667 | -75.949722 |
| Charles | 382900N | 0765859W | 38.483333 | -76.983056 |
| Dorchester | 382800N | 0755959W | 38.466667 | -75.999722 |
| Frederick | 392800N | 0772359W | 39.466667 | -77.399722 |
| Garrett | 393300N | 0791459W | 39.55 | -79.249722 |
| Harford | 393300N | 0761759W | 39.55 | -76.299722 |

| Table A4-14-1: Geographic coordinates (NAD83) of county centroids, from the Geographic Names Information System (GNIS), January 2011 (Feature class = Civil) | | | | |
|---|-----------------------|------------------------|-----------------------------|------------------------------|
| County | Latitude (DMS) | Longitude (DMS) | Latitude (dec. deg.) | Longitude (dec. deg.) |
| Howard | 391501N | 0765559W | 39.250278 | -76.933056 |
| Kent | 391800N | 0760159W | 39.3 | -76.033056 |
| Montgomery | 390900N | 0771159W | 39.15 | -77.199722 |
| Prince Georges | 385000N | 0765059W | 38.833333 | -76.849722 |
| Queen Anne's | 390400N | 0755859W | 39.066667 | -75.983056 |
| Somerset | 380800N | 0754359W | 38.133333 | -75.733056 |
| St. Mary's | 381800N | 0763659W | 38.3 | -76.616389 |
| Talbot | 384600N | 0760459W | 38.766667 | -76.083056 |
| Washington | 393700N | 0774559W | 39.616667 | -77.766389 |
| Wicomico | 382200N | 0753559W | 38.366667 | -75.599722 |
| Worcester | 381200N | 0752259W | 38.2 | -75.383056 |

Alternate Geometry

Definition: Alternate method of storing geospatial footprint; description of authoritative source of geographic location & how simple coordinates derived – optional

Value: values varied depending on the source of information

1. Geographic coordinates (NAD83) represent an approximate location based on field map and notes, [description of features in the vicinity], [county name] County, Maryland; coordinates acquired from the U.S. Geological Survey's Geographic Names Information System (GNIS).
2. Geographic coordinates, based on NAD83, represent the coordinates of [site location] ([GNIS feature type]), as shown on the [quadrangle name] quadrangle, from the U.S. Geological Survey's Geographic Names Information System (GNIS), [date of GNIS query].
3. Geographic coordinates (NAD83) represent the centroid of [county name] County, Maryland, from the U.S. Geological Survey's Geographic Names Information System (GNIS)."

Source: determined by curator, based on source of geographic coordinates

Examples:

1. "Geographic coordinates (NAD83) represent an approximate location based on field map and notes, along the Chesapeake Bay shoreline, E and slightly N of Far Cry Farm Lane, St. Mary's County, Maryland; coordinates acquired from the U.S. Geological Survey's Geographic Names Information System (GNIS)."
2. "Geographic coordinates, based on NAD83, represent the coordinates of Cove Point (Cape), as shown on the Cove Point quadrangle, from the U.S. Geological Survey's Geographic Names Information System (GNIS), 1/16/2013."
3. "Geographic coordinates (NAD83) represent the centroid of Queen Anne's County, Maryland, from the U.S. Geological Survey's Geographic Names Information System (GNIS)."

OnlineResource

Definition: URL pointer(s) to textual information about specific record - optional

Value: none supplied

Source: n/a

BrowseGraphic

Definition: URL pointer(s) to images representing specific record - optional

Value: none supplied

Source: n/a

Date

Definition: Meaningful date (e.g., collection date) attached to record; may be to any degree of precision or left blank (e.g., 20010101, 1939-1945, -20030331, 2000) - optional

Value: Date on which the site was surveyed, in YYYYMMDD format

Source: Label on photograph envelope and/or film negative envelope

Examples: Dates as they occur on the envelopes, "6-5-74" or "OCT 1 1970," for example, were reformatted, respectively, as follows: "19740605" or "19701001"

DatasetReferenceDate

Definition: Reference date indicating currency of underlying data record (e.g., date metadata record added to National Catalog); format=YYYYMMDD - mandatory

Value: Date record provided to NGGDPP for uploading to the *ScienceBase Catalog*, in YYYYMMDD format, namely "20130918"

Source: Provided by curator

VerticalExtent

Definition: Vertical extent (e.g., vertical depth information for rock core samples); contains 2-3 elements: unit of measure, max value, min value (e.g., m, 35.4, 0 => rock core measured at 35.4 total meters)

Value: n/a

Source: n/a

APPENDIX 5

MGS Data Preservation Advisory Panel 2012-2013 Membership

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