

Electronic Records and Imaging Policy  
For Wilson County

This policy is modeled after the Department of Natural and Cultural Resources  
Guidance Guidelines for Managing Trustworthy Digital Public Records.  
This model policy applies to both born-digital electronic records and electronic  
records generated by imaging systems.

Effective Date: \_\_\_\_\_

Type of Government: County

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## **1. Purpose**

The records covered by this policy are in the custody of Wilson County and are maintained for the benefit of agency use in delivering services and in documenting agency operations. This electronic records policy reflects guidelines set in the North Carolina Department of Natural and Cultural Resources publication, Guidelines for Managing Trustworthy Digital Public Records. Complying with this policy will increase the reliability and accuracy of records stored in information technology systems and will ensure that they remain accessible over time. Exhibiting compliance with this policy will enhance records' admissibility and acceptance by the judicial system as being trustworthy.

All public records as defined by North Carolina G.S. § 132-1 are covered by this policy. This includes permanent and nonpermanent records and confidential and non-confidential records. These classifications may warrant different treatments when processing the records. This policy serves as basic documentation of the procedures followed by the department in imaging, indexing, auditing, backing up and purging electronic records in accordance with the disposition schedule and in handling the original paper record, if applicable.

This policy also serves to protect those records digitized by the agency's in-house imaging system, which reduces required storage space for original documents as the agency transitions to a "paperless" digital system and provides instant and simultaneous access to documents as needed.

The form provided in Section 9 of this document, Request for Disposal of Original Records Duplicated by Electronic Means, is completed and submitted to the Department of Natural and Cultural Resources whenever this agency wishes to dispose of a new series of paper records that have been digitized.

This policy will supersede any electronic records system policy previously adopted. This policy will be reevaluated at a minimum of every five years or upon the implementation of a new information technology system and will be updated as required. A copy of this policy will remain on file at the Department of Natural and Cultural Resources.

## **2. Responsible Parties**

In order for this policy to become effective, Wilson County Managers/ Directors and all Records Creators will sign the included Signature Page.

- Managers/ Directors
- Technology Department
- Records Creators

### **Managers/ Directors**

Responsibilities include:

1. Determining access rights to the system
2. Approving system as configured by Technology
3. Ensuring training of records creators
4. Periodically auditing imaged records for accuracy, readability and reproduction capabilities before the original documents are destroyed

### **Technology Department**

Responsibilities include:

1. Installing and maintaining equipment and software
2. Configuring the system according to agency needs, including creating and testing applications and indexes
3. Controlling permission rights to the system
4. Maintaining documentation of system hardware and software
5. Establishing audit trails that document actions taken on records stored by the information technology system
6. Providing backups for system records and recovering deleted imaged records when necessary
7. Completing a disaster recovery backup every year
8. Establishing and providing training on equipment and software, documenting such training and providing remedial training as needed.
9. Creating and updating detailed procedural manuals describing the imaging process and equipment
10. Conducting any necessary batch conversions or batch renaming of imaged records

## **Records Creators**

Responsibilities Include:

1. Attending training conducted by Technology Department
2. Creating passwords for computers that are long, complex and frequently changed
3. Creating and managing electronic records in their preview in accordance with these policies and other guidance issued by the Department of Natural and Cultural Resources and complying with all security policies
4. Guaranteeing that records, regardless of format, be retained for the period of time required by local records retention schedules
5. Carrying out day-to-day processes associated with the agency's imaging program, including:
  - Designating records to be entered into the imaging system
  - Noting confidential information or otherwise protected records and fields
  - Completing indexing guide form for each record being scanned
  - Reviewing images and indexing for quality assurance
  - Naming and storing the scanned images in designated folders
  - Once approved, destroying or otherwise disposing of original records in accordance with guidance issued by the Department of Natural and Cultural Resources

### **3. Availability of System and Records for Outside Inspection**

Wilson County recognizes that the judicial system may request pretrial discovery of the information technology system used to produce records and related materials. Agency personnel will honor requests for outside inspection of the system and testing of data by opposing parties, the court and government representatives. Records will be available for inspection and audit by a government representative for the full period required by law and approved records retention schedules, regardless of the life expectancy of the media on which the records are stored. Records will continue to exist when litigation, government investigation, or audit is pending, imminent, or if a court order may prohibit specified records from being destroyed or otherwise rendered unavailable.

In order to lay a proper foundation for the purposes of admitting the agency's electronic records into evidence, Wilson County will be able to provide up-to-date, detailed documentation that describes the procedural controls employed in producing records; procedures for input control including tests used to assure accuracy and reliability; and evidence of the records' chain of custody. In addition to this policy, such documentation will include:

- Procedural manuals
- System documentation
- Training documentation
- Audit documentation
- Audit Trails

Wilson County will honor inspection and copy requests pursuant to N.C.G.S. § 132. Wilson County will produce the records in the order they were created and used in the course of business and in a format, it is capable of producing if asked by the requesting party; however, Wilson County is not required to create or compile a record that does not already exist. If it is necessary to separate confidential from non-confidential information in order to permit the inspection or copying of the public records.

#### **4. Maintenance of Trustworthy Electronic Records**

##### **Produced by Methods that Ensure Accuracy**

All platforms used by Wilson County to create and manage electronic records, including e-mail, social media and cloud computing, will conform to the Department of Natural and Cultural Resources' policies and applicable security policies.

Electronic files are named in accordance with the Best Practices for File-Naming published by the Department of Natural and Cultural Resources.

Files names will

be kept to a minimum yet descriptive and follow a standard format (ex. Paving\_frontst\_022016). Files can be stored in the following formats: bmp, csv, dbf (ESRI Map database file), doc (Microsoft Word), gif (GIF file), htm (Hypertext Markup (HTML)), jpg (JPEG), pdf (Adobe PDF), rtf (Rich Text Format), shp (ESRI May shape file), shx (ERSI Map shape index file), txt (Notepad), wav (WAV), xls (Excel), xml (XML file), docx, xlsx and xsl. Should a better file format become available, then consideration will be given on the conversion to the new format.

## **Maintained in a Secure Environment**

Security of the system and the records it holds is maintained in the ways:

- Access rights are managed by the Technology Services and are assigned by a supervising authority to prevent unauthorized viewing of documents.
- Physical access to computers, disks and external hard drives is restricted.
- All system password and operating procedures manuals are kept secure.

## **Stored on Media that is Regularly Assessed and Refreshed**

Data is converted to new usable file types as old ones become obsolete. The following steps are taken to ensure the continued accessibility of records kept in electronic formats:

- Data is audited and assessed annually. If there is evidence of file corruption, data should be migrated to new media.
- Media storage will be refreshed every five years.
- Whatever media is used to store imaged data will be clearly labeled with enough information that its contents can be determined.
- Storage media will be maintained in a manner which adheres to the media manufacturer's recommendation for specific environmental conditions in which the media should be stored.

## **5. Components of Information Technology System**

All employees who are designated to access or create electronic records will be made aware of system procedures and policies, trained on them and confirm by initialization or signature acknowledging that they are aware of the policies and have received training on them.

### **Training Programs**

Technology Services will conduct training for system use and electronic records management, using materials published by the Department of Natural and Cultural Resources when appropriate. All employees will be made aware

of system procedures and policies and trained on them; employees will acknowledge by signature that they are aware of the policies and have received training on them. When appropriate, employees will also attend trainings offered by the Department of Natural and Cultural Resources on the maintenance of electronics records. Documentation will be maintained for the distribution of written procedures, attendance of individuals at training sessions and refresher training programs, and other relevant information.

## **Audit**

Audits are designed to evaluate the process of system's accuracy, timeliness, adequacy of procedures, training provided, and the existence of audit trails. Internal audits are conducted regularly by Technology staff, at least annually.

## **6. Documentation of Information Technology System**

### **System Design**

The agency maintains documentation that describes system procedures, practices, and workflows. The documentation also identifies system software and hardware and captures the system environment in terms of the organizational structure, functions and responsibilities, and system processes. It explains how the system operates from a functional user and data processing point of view. Documentation is reviewed and updated by Technology staff annually or upon implementation of a new information technology system. Such documentation maintained by the agency includes:

- Procedural manuals
- System documentation
- Security backup and disaster recovery procedures as a part of the Continuity of Operations Plan

### **Retention of System Documentation**

One set of all system documentation will be maintained during the period for which the records produced by the process or system could likely be subject to court review and until all data created by every system instance has been



destroyed or transferred to a new operating environment. All such documentation is listed in the County's record retention schedule.

## **7. Digital Imaging Program Documentation and Procedures**

### **System and Procedural Documentation**

Technology Services is responsible for preparing and updating detailed procedures that describe the process followed to create and manage imaged electronic records. This documentation will include a description of the system hardware and software. A current procedural manual will be maintained to ensure the most current steps are followed and to ensure reliable system documentation will be available for judicial or similar proceedings.

Each workstation designated as a scanning station will have at minimum, the following hardware and software, unless the scanner is collocated by means of a network interface.

- Document/image scanner authorized by Technology
- Driver software for scanner
- Imaging software
- Instructions manual maintained by Technology staff describing in detail the steps required in the scanning process. This manual will also define:
  - The resolution of scanned images, as well as any compression standard used
  - The file formats of scanned images
  - The file naming conventions used for scanned images
  - Whether batch conversion or batch file re-naming will be necessary and what tools is used for such conversions
  - Whether any image enhancement techniques should be conducted after imaging

### **Training**

Only designated staff that have been formally trained by Technology staff and have signed off on the training documentation on the use of the imaging software and equipment will be allowed to scan records. Components of the training will include basic techniques for image capture, indexing, quality

control, security configuration, auditing, use of equipment, and general system maintenance. Permissions to image and index records will not be assigned until the user has been trained. Training will be provided to each record creator on the use of the imaging station, transfer of scanned documents to the media storage device, file naming process and indexing.

All imaged records will be indexed to facilitate efficient retrieval, ease of use and to update information. The indexing will follow the guidelines set by the Department of Natural and Cultural Resources Other Electronic Records Management Practices.

## **Auditing and Audit Trails**

Staff trained to conduct imaging will conduct a quality control audit following the imaging of a record to ensure that the following features of the imaged record are legible:

- Individual letters, numbers, and symbols
- Combinations of letters, numbers, and symbols forming words or sentences
- Graphics such as signatures, logos, and pictures
- Other features or records such as color, shape, texture, etc., that relate to the content of the information

Managers/ Directors for the various departments of the County will also periodically audit imaged records for accuracy, readability, and reproduction capabilities. Written quality control documentation will be prepared indicating the sampling of records and what remedial procedures were followed if the expected level of accuracy was not achieved.

Audit trails document the identity of the individual(s) who creates, duplicates, modifies, or otherwise prepares the records, what actions are taken by the individual during the course of the process, when these actions are taken, and what the results of these actions are. Audit Trails Editions listed at the end of the policy.

## **Retention of Original and Duplicate Records**

To obtain permission to destroy original records following imaging, Wilson County will complete Section 9 of this document, Request for Disposal of Original Records Duplicated by Electronic Means. For each records series identified for scanning, the Department of Natural and Cultural Resources must approve the destruction of the original records. Permanent records may be imaged for ease of access, but the original documents may not be destroyed unless an analog copy exists prior to the records' destruction.

Destruction of original records is allowed only after quality assurance has been conducted on the imaged records, necessary corrections have been made, the electronic records system is audited for accuracy, and the destruction of records has been approved.

If digital images replace the original records and assume all legal authorities, these scanned records will be considered the record copy and must be maintained for the specified retention period defined in the appropriate records retention and disposition schedule. The retention period is considered to have begun when the original document was created, not when the electronic version was produced. Any hard copy generated from the imaged records will be considered the agency's duplicate "working" record or reference copy.

Security backups of all imaged documents will be generated and maintained off-site. Imaged documents will be synchronized to a secured off-site location daily upon document changes or upon document scanning. A backup copy of the scanned data and index database is created on a nightly basis for the purpose of document recovery.

### **8. Compliance and Electronic Records Self-Warranty**

Wilson County is responsible for ensuring the authenticity and accuracy of the electronic records. This self-warranty of records does not authorize the destruction of records, originals or copies, nor does it change current records retention and disposition scheduling procedures.

## **Records Custodian**

The records custodian is the person responsible for creating records or managing the staff who creates records. The records custodian certifies that:

\_\_\_\_\_ The records created or duplicated by electronic means in this office are prepared in accordance with these guidelines as indicated by the following statements:

- Quality - Records are legible, accurate, and complete.
- The records are produced or reproduced as part of a regularly conducted activity.
- The records conform to DNCR guidance regarding file formats, file naming, and if applicable digital preservation guidance produced by DNCR.
- Detailed, documented procedures are in place and followed when the records are created, copied, modified, or duplicated.
- The person(s) who creates, copies, modifies, or duplicates the records receives formal training on detailed system procedures prior to records preparation.
- Training records are signed by employee after receiving training.
- Reviewing system records annually and purging records in accordance with the retention schedule.

\_\_\_\_\_ Wilson County will comply with the best practices and standards established by the Department of Natural Cultural Resources as published on its website.

\_\_\_\_\_ Wilson County will submit to the Department of Natural Cultural Resources Section 10 of the policy, Request for Disposal of Original Records Duplicated by Electronic Means, to seek approval for the destruction of original records that have been converted from paper to electronic record.

\_\_\_\_\_ Affected records creators will be trained on the proper creation and maintenance of electronic records.

\_\_\_\_\_ Imaged records will be periodically audited for accuracy, readability and reproduction capabilities before the original documents are destroyed.

Approved

Date:

by: \_\_\_\_\_

Title: \_\_\_\_\_

Signature: \_\_\_\_\_

## **Technology Department**

The IT Professional is the person responsible for providing technical support to the records custodians and who may be involved in infrastructure and system maintenance. In the absence of the Technology department, the supervisor of the records custodian should verify the following items.

Technology certifies that:

\_\_\_\_\_ Audit trails document the identity of the individual(s) who creates, duplicates, modifies, or otherwise prepares the records, what actions are taken by the individual during the course of the process, when these actions are taken, and what the results of these actions are.

\_\_\_\_\_ Audits:

- are performed periodically to confirm that the process or system produces accurate results.
- confirm that procedures actually followed are in accordance with procedure stated in the system's documentation.
- are performed routinely on documents to ensure no information has been lost.
- are performed by an independent source (i.e., persons other than those who create the records or persons without an interest in the content of the records. Acceptable source may include different department or authorized auditing authority).
- are adequately documented.

\_\_\_\_\_ The process or system hardware and software are adequately documented.

\_\_\_\_\_ Permanent records conform to all file format, file naming, and digital preservation guidance produced by the Department of Natural and Cultural Resources.

\_\_\_\_\_ Back up procedures are in place and comply with best practices, as established by the Department of Natural and Cultural Resources.

\_\_\_\_ Successful disaster recovery back up is completed at least once every two years.

### Audit Trail Editions

The table below lists the event classes, the events within each class, and whether those events can be audited for the Audit Trail. The ● symbol indicates that the event can be audited when it is attempted, regardless of whether the attempt was successful.

Event Class	Event	Audit Trail Editions
<b>Account</b>	Assign Tag	●
	Change Group Membership	●
	Change Password	●
	Configure Windows Authentication	●
	Create Trustee	●
	Delete Trustee	●
	Group Watermark	●
	Link Windows and Laserfiche Accounts	●
	Modify Trustee	●
<b>Annotation</b>	Create Annotation	●
	Delete Annotation	●
	Modify Annotation	●
	Move Annotation to New Page	●
<b>Auditing</b>	Change Audit Configuration	●
	Purge Audit Logs	●

Event Class	Event	Audit Trail Editions
<b>Custom Audit Event</b>	Custom Event	●
<b>Electronic Data</b>	Delete Alternate E-File	●
	Delete E-File	●
	Purge E-File	●
	Recycle E-File	●
	Restore E-File	●
	Write Alternate E-File	●
	Write E-File Contents	●
<b>Entry</b>	Add Document to Link Group	●
	Assign Template	●
	Change Entry Owner	●
	Change Entry Permissions	●
	Change Folder Filter	●
	Check In Entry	●
	Check Out Entry	●
	Copy Entry	●
	Copy Version	●
	Create Document	●
	Create Folder	●
	Create Shortcut	●
	Create Version	●
	Delete Entry	●

Event Class	Event	Audit Trail Editions
	Delete Version	●
	Edit Version Controlled Document	●
	Enable Version Tracking	●
	Link Entry	●
	Migrate Entry	●
	Modify Entry Classification	●
	Modify Version Comment	●
	Modify Version Label	●
	Move Entry	●
	Purge Entry	●
	Recycle Entry	●
	Remove Digital Signature	●
	Remove Document from Link Group	●
	Restore Entry	●
	Revert To Version	●
	Sign Document	●
	Start Business Process	●
	Tag Entry	●
	Write Field Value	●
<b>Export and Print</b>	Export Briefcase	●
	Export Document	●



Event Class	Event	Audit Trail Editions
	Print Document	●
<b>LDAP Event</b>	Modify LDAP Profile	●
	Register LDAP Profile	●
	Unregister LDAP Profile	●
<b>Metadata</b>	Add Template Field	●
	Change Field Rights	●
	Change Template Rights	●
	Create Business Process	●
	Create Business Process Details	●
	Create Field	●
	Create Template	●
	Delete Field	●
	Delete Template	●
	Modify Business Process	●
	Modify Field	●
	Modify Template	●
	Move Template Field	●
	Remove Template Field	●
<b>Page</b>	Copy Pages	●
	Create Page	●
	Delete Pages	●
	Modify Page	●

Event Class	Event	Audit Trail Editions
	Move Pages	●
	Purge Pages	●
	Recycle Pages	●
	Restore Pages	●
Privileged Operations	Add Certificate	●
	Create Classification Level	●
	Create Link Type	●
	Create Tag	●
	Delete Certificate	●
	Delete Classification Level	●
	Delete Link Type	●
	Delete Tag	●
	Modify Classification Level	●
	Modify Link Type	●
	Modify Tag	●
	Set Repository Options	●
<b>Records Management Actions*</b>	Close Record Folder*	●
	Confirm Final Disposition*	●
	Confirm Transfer*	●
	Cutoff Record Folder*	●
	Freeze*	●
	Reopen Record Folder*	●

Event Class	Event	Audit Trail Editions
	Review Vital Record*	●
	Set Alternate Disposition Trigger Event*	●
	Set Event Date*	●
	Uncutoff Record Folder*	●
	Unfreeze*	●
	Unset Alternate Disposition Trigger Event*	●
	Unset Event Date*	●
<b>Records Management File Plan*</b>	Add Cutoff Instruction Event*	●
	Add/Edit Calendar Cycle*	●
	Add/Edit Cutoff Instruction*	●
	Add/Edit Event*	●
	Add/Edit Location*	●
	Add/Edit Retention Schedule*	●
	Add/Edit Transfer*	●
	Create Records Series*	●
	Delete Calendar Cycle*	●
	Delete Cutoff Instruction*	●
	Delete Event*	●
	Delete Location*	●
	Delete Retention Schedule*	●
	Delete Transfer*	●

Event Class	Event	Audit Trail Editions
	Edit Record Series/Folder*	●
	Remove Cutoff Instruction Event*	●
<b>Search</b>	Search	●
<b>Session</b>	Log Off	●
	Log On	●
	Terminate Session	●
View Content	Browse Entry	●
	View Document	●
	View Folder Contents	●
Volume Operations	Attach Volume	●
	Change Volume Rights	●
	Create Volume	●
	Delete Volume	●
	Export Volume	●
	Modify Volume	●
	Rollover Volume	●

Approved

Date:

by: \_\_\_\_\_

Title: \_\_\_\_\_

Signature: \_\_\_\_\_

**FOR DEPARTMENT OF NATURAL AND CULTURAL RESOURCES USE**

Approved

Date:

by: \_\_\_\_\_

Title: \_\_\_\_\_

Signature: \_\_\_\_\_

**9. Request for Disposal of Original Records Duplicated by Electronic Means**

This form is used to request approval from the Department of Natural and Cultural Resources to dispose of non-permanent paper records that have been scanned, entered into database, or otherwise duplicated through digital imaging or other conversion to a digital environment. This form does not apply to records that have been microfilmed or photocopied.