Record Keeping For Floodplain Managers

Box of records in a closet

Records kept digitally
Why Do Communities Need To Maintain Records?

- To provide fast and accurate information after a disaster.
- To provide the required answers to questions during a CAV audit.
- In case FEMA asks for information to use in making more accurate maps.
- For open records purposes.
- CRS points given to communities for keeping records.
More Reasons to Maintain Records

- In order to resolve insurance issues related to “grandfather” rules or substantial improvement.

- Tracking LOMCs on the community’s map.

- Document the permitting process. You may be asked to explain a permitting issue from a previous year.

- Keeping track of violations and the resolution.

- Good record keeping makes it easier when there is a staff change.
Common Documents

• **Floodplain Development Permits** – All development
• **Floodproofing Certificates** – Non-Residential
• **Elevation Certificates** – PostFIRM building in A zones should have one.
• **Letters of Map Change** – LOMA, LOMR, LOMR-F, CLOMR
• **Inspection Records** – Easier to fix a mistake early.
• **Permits from State and Federal Agencies** – DWR, USACE
• **No Rise Certificate** – Development in Floodway
• **Reference Materials** – Start a library
• **Variances** – Copy of community letter and variance request.
• **Violations** – Copies of letters, photos, and document resolution.
Where and How To Keep Documents

How long do you keep records?
How long do you keep land use records?

- What about records related to the Community Rating System program in your community?
Using computers and especially GIS can combine the best advantages of any system.

Floodplain Development Permit
Every Situation Is Different
Each system has advantages and disadvantages

- Flood permit combined with building permit records
- File just for Floodplain Development Permits
- Filed by year or filed by address/lot number/parcel identification
- Variances and Violation Notices
- Shove everything in a box and then forget where the box is
- Spreadsheets for tracking
- Numbering system for tracking records

Written Administrative Procedures
Spreadsheets make it easy to locate data quickly without digging through files. This example is from Shawnee County.

<table>
<thead>
<tr>
<th>PERMIT NO.</th>
<th>TYPE</th>
<th>ISSUE DATE</th>
<th>PARCEL ID #</th>
<th>PROPERTY ADDRESS</th>
<th>CITY</th>
<th>ZIP CODE</th>
<th>FLOOD ZONE</th>
<th>AREA BFE</th>
</tr>
</thead>
<tbody>
<tr>
<td>79-434</td>
<td>SWT</td>
<td>9/25/79</td>
<td>0810100001001010</td>
<td>7645 NW 46th ST</td>
<td>SILVER LK</td>
<td>66539</td>
<td>N/A</td>
<td>N/A</td>
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<td>88-205</td>
<td>SFN</td>
<td>6/29/88</td>
<td>0810100001001010</td>
<td>7645 NW 46th ST</td>
<td>SILVER LK</td>
<td>66539</td>
<td>N/A</td>
<td>N/A</td>
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<td>89-114</td>
<td>SFN</td>
<td>4/24/89</td>
<td>2083300001001010</td>
<td>10425 SE BERRYTON</td>
<td>BERRYTON</td>
<td>66409</td>
<td>A</td>
<td>936.80</td>
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<tr>
<td>89-278</td>
<td>SFN</td>
<td>9/15/89</td>
<td>0710100001001080</td>
<td>3845 NW DAVIS RD</td>
<td>ROSSVILLE</td>
<td>66533</td>
<td>A</td>
<td>914.00</td>
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<tr>
<td>96-146</td>
<td>SFN</td>
<td>8/30/96</td>
<td>1062304001002000</td>
<td>4124 NE BRIER RD</td>
<td>TOPEKA</td>
<td>66616</td>
<td>FW</td>
<td>874.80</td>
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<tr>
<td>97-283</td>
<td>SFA</td>
<td>5/27/97</td>
<td>1972500003009000</td>
<td>10048 SW JORDAN RD</td>
<td>WAKARUSA</td>
<td>66546</td>
<td>FW</td>
<td>960.10</td>
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<tr>
<td>97-561</td>
<td>ACS</td>
<td>10/17/97</td>
<td>1882700001001010</td>
<td>9300 SW HODGES RD</td>
<td>AUBURN</td>
<td>66402</td>
<td>A</td>
<td>N/A</td>
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<tr>
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<td>1672600001004000</td>
<td>13514 SW K4 HWY (13600)</td>
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<td>66610</td>
<td>A</td>
<td>995.00</td>
</tr>
<tr>
<td>98-387</td>
<td>ACS</td>
<td>7/20/98</td>
<td>0482800001005000</td>
<td>5722 NW HALL RD</td>
<td>ROSSVILLE</td>
<td>66533</td>
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<td>930.00</td>
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<td>2141800001001000</td>
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<td>00-580</td>
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<td>10/18/00</td>
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<td>TOPEKA</td>
<td>66610</td>
<td>AFW</td>
<td>1010.00</td>
</tr>
</tbody>
</table>
Overland Park tracks records using GIS
They have hyperlinked permits and records to the parcel layers in the map.
A property with a rescinded LOMC
In this example from Lyon County they have a layer that shows which parcels have elevation certificates. They have also scanned and linked the elevation certificates.
In these sample maps you can see the map on the left shows LOMC case numbers. In the map on the right case numbers and elevation data layers are both shown at the same time.
Maps are also records.

- What type of map is it?
- Community Name
- Panel of the Map
- Community Number
- Site diagram
- Community Number with Panel Number
- Revisions
- Effective Date

This information is used on many forms.
FIRMette

MAP SCALE 1" = 1000'

PANEL 0245D

FIRM
FLOOD INSURANCE RATE MAP
LYON COUNTY,
KANSAS
AND INCORPORATED AREAS

PANEL 245 OF 500
(SEE MAP INDEX FOR FIRM PANEL LAYOUT)
CONTAINS

COMMUNITY

NUMBER PANEL SUFFIX

EMPIORA, CITY OF
200203 0245 0

LYON COUNTY
200201 0345 0

Notice to User: The Map Number shown below should be used when placing map orders; the Community Number shown above should be used on insurance applications for the subject community.

MAP NUMBER
2011C0245D
EFFECTIVE DATE
FEBRUARY 20, 2008

Federal Emergency Management Agency

This is an official copy of a portion of the above referenced flood map. It was extracted using F-MAP OnLine. This map does not reflect changes or amendments which may have been made subsequent to the date on the title block. For the latest product information about National Flood Insurance Program flood maps check the FEMA Flood Map Store at www.msc.fema.gov
Do you keep LOMAs and LOMRs with the maps?
Accurate and complete documentation.

Look at the map index and the map panel. Check elevation certificates and other forms for errors before accepting them.
Some common mistakes with the forms.

- Lines left blank.
- Typing errors.
- Check datum used.
- Check feet not meters
- EC only without a permit.
- Using expired form.
- Check box for engineered openings but no certificate.
- Incorrect Base Flood Elevation.
- Equipment not explained in comments.
- Incorrect building diagrams!

Keep accurate and complete records.
**Elevation Certificate Section A8.d**

Lower floor enclosures, crawl spaces and openings.

<table>
<thead>
<tr>
<th>A8. For a building with a crawlspace or enclosure(s):</th>
</tr>
</thead>
<tbody>
<tr>
<td>a) Square footage of crawlspace or enclosure(s)</td>
</tr>
<tr>
<td>b) Number of permanent flood openings in the crawlspace or enclosure(s) within 1.0 foot above adjacent grade</td>
</tr>
<tr>
<td>c) Total net area of flood openings in A8.a</td>
</tr>
<tr>
<td>d) Engineered flood openings?</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>A9. For a building with an attached garage:</th>
</tr>
</thead>
<tbody>
<tr>
<td>a) Square footage of attached garage</td>
</tr>
<tr>
<td>b) Number of permanent flood openings in the attached garage within 1.0 foot above adjacent grade</td>
</tr>
<tr>
<td>c) Total net area of flood openings in A9.a</td>
</tr>
<tr>
<td>d) Engineered flood openings?</td>
</tr>
</tbody>
</table>

Line A8.d is for engineered flood openings. There are several companies that make these openings. They certify the opening as being valid for a certain amount of square feet of enclosed space. Engineered openings come with a certificate. **The certificate for the opening should be copied and attached to the elevation certificate and to the permit.**
Visit http://gis.kda.ks.gov/ksfloodplain/ and make a copy of the BFA map to keep with the permit as documentation of the water surface elevation and source of data.
Planning and Environmental Division
Planning Branch

Mr. Josh Junghans
Kaw Valley Engineering, Inc.
2319 North Jackson
Junction City, KS 66441

Dear Mr. Junghans:

This is in response to your request for a Base Flood Elevation for property at 14846 Race Track Road, Junction City, Kansas, in the SW/4, Sec. 27, T. 11 S., R. 6 E., Geary County.

The current Federal Emergency Management Agency’s Flood Insurance Rate Map (community-panel 200379 0055, dated February 4, 1998) indicates the property is in Zone A (the approximate 100-year flood plain of the Kansas River).

Using the Geary County FIS, we have determined that the Base Flood Elevation (BFE) for this property is 1065 feet National Geodetic Vertical Datum (NGVD 29). Any development constructed to local flood plain regulations from flood insurance requirements must be constructed to local flood plain regulations. To officially remove structures from flood insurance requirements, a letter of Map Amendment (LOMA) can be obtained from FEMA if the lowest adjacent grade and lowest floor elevations are above the BFE.

Using the Geary County FIS, we have determined that the Base Flood Elevation (BFE) for this property is 1065 feet National Geodetic Vertical Datum (NGVD 29). Any development on this site must be constructed to local flood plain regulations. To officially remove structures from flood insurance requirements, a letter of Map Amendment (LOMA) can be obtained from FEMA if the lowest adjacent grade and lowest floor elevations are above the BFE.

Sincerely,

Edwin J. Mossman, Ph. D.
Chief, Planning Branch

WATER RESOURCES RESERVE
OCT 05 2012
US DEP OF AGRICULTURE
Document Accessory Structures

- Not habitable
- Anchored to resist floating
- Flood openings/vents
- Built of flood resistant materials
- Elevated utilities
- Used only for storage or parking
- Cannot be modified for a different use in the future

Elevation Certificate would document elevation of utilities and openings.
Floodway “No Rise” Certification

• Floodways can be dangerous because water may flow very fast
• Development is not allowed unless “no rise” in flood levels is certified
• An engineer must evaluate the hydraulic impact of proposed development
• A “no rise” certification is recommended and must be signed, sealed, and dated by a registered professional engineer

Engineering “No-Rise” Certification (example)

This is to certify that I am a duly qualified engineer licensed to practice in the State of Kansas. It is to further certify that the attached technical data supports the fact that proposed (Name of Development) will not impact the Base Flood Elevations (100-year flood), floodway elevations and the floodway widths on (Name of Stream).

Signature ___________________ Seal_________________

May be in form of a letter.
How to Elevate Your Floodplain Building

Elevate on Foundation Walls

- Service equipment such as utilities and electrical circuits, above flood level
- Openings in walls allow water to flow in and drain out

Elevate on Fill

- Compacted fill recommended 10’ – 15’ beyond house

A FEMA LOMR-F, Endangered Species Review, and a DWR Floodplain Fill Permit could be required for house shown on fill.
Flood Map Revisions Issued by FEMA

- **Letter of Map Amendment (LOMA)**
- **Letter of Map Revision (LOMR)**
- **Letter of Map Revision Based on Fill (LOMR-F)**
- **Physical Map Revision (LOMR PMR)**
- **LOMA Out As Shown (Structure not in Zone A)**

Keep copies with flood maps, GIS system, permits…
This is a house in Kansas. It already had a LOMA approved in June of 2010 when this picture was taken. If you suggest that a property owner consider preferred risk insurance do you have a way of documenting that?
Keep A Floodplain Reference Library

Order publications by calling 1-800-480-2520
Repetitive Loss Properties

- Do you know where the repetitive loss properties in your community are?
- Is the information about those properties accurate?

Why is this important?
For more information order Idiot’s Guide to Floodplain Management.

This book will solve all of your floodplain problems.
Tom Morey, CFM
Questions?

Steve Samuelson, NFIP Specialist, CFM
Tom’s Flunky
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785-296-4622
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