APPENDIX C

FLOOD OVERLAY

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FL FLOOD OVERLAY PROVISIONS

A. Any permitted developments in the 100 year flood plain shall be designed to allow participation in the National Flood Insurance Program.-ALL PERMITS

B. The issuance of permits for developments within the channel of a stream or river is prohibited (except as provided for in Section G., paragraph 2.i. and in Section I., paragraph 5.) -ALL PERMITS

C. 100 year flood plains and flash flood areas are encouraged to be used as open space, recreational, and agricultural land uses.-ALL PERMITS

D. Definitions

Unless specifically defined below, words or phrases used in these regulations shall be interpreted to give them the meaning they have in common usage and to give these regulations its most reasonable application.

Alluvial Fan Flooding – Flooding occurring on the surface of an alluvial fan or similar landform which originates at the apex and is characterized by high-velocity flows; active processes of erosion, sediment transport, and deposition; and unpredictable flow paths.

Apex – A point on an alluvial fan or similar landform below which the flow path of the major stream that formed the fan becomes unpredictable and alluvial fan flooding can occur.

Area of Shallow Flooding – A designated AO, AH, or VO zone on a community's Flood Insurance Rate Map (FIRM) with a one percent chance or greater annual chance of flooding to an average depth of one to three feet where a clearly defined channel does not exist, where the path of flooding is unpredictable and where velocity flow may be evident. Such flooding is characterized by ponding or sheet flow.

Base Flood - The flood having a one percent chance of being equaled or exceeded in any given year.

Basement – Any area of the building having its floor sub-grade (below ground level) on all sides.

Channel - A watercourse with a definite bed and banks which confine and conduct the normal continuous or intermittent flow of water.

Critical Feature – An integral and readily identifiable part of a flood protection system, without which the flood protection provided by the entire system would be compromised.

Development – Any man-made change in improved and unimproved real estate, including but not limited to buildings or other structures, mining, dredging, filling, grading, paving, excavation or drilling operations or storage of equipment or materials.

Elevated Building – A non-basement building (i) built, in the case of a building in Zones A1-30, AE, A, A99, AO, AH, B, C, X, and D, to have the top of the elevated floor, or in the case of a building in Zones V1-30, VE, or V, to have the bottom of the lowest horizontal structure member of the elevated floor elevated above the ground level by means of pilings, columns (posts and piers), or shear walls parallel to the floor of the water and (ii) adequately anchored so as not to impair the structural integrity of the building during a flood of up to the magnitude of the base flood. In the case of Zones A1-30, AE, A, A99, AO, AH, B, C, X, and D, "elevated building" also includes a building elevated by means of fill or solid foundation perimeter walls with openings sufficient to facilitate the unimpeded movement of flood waters. In the case of Zones V1-30, VE, or V, "elevated building" also includes a building otherwise meeting the definition of "elevated building," even though the lower area is enclosed by means of breakaway walls if the breakaway walls met the standards of Section 60.3(e)(5) of the National Flood Insurance Program regulations.

Existing Construction – For the purposes of determining rates, structures for which the "start of construction" commenced before the effective date of the FIRM or before January 1, 1975, for FIRMs effective before that date. "Existing construction" may also be referred to as "existing structures."

Existing Manufactured Home Park or Subdivision – A manufactured home park or subdivision for which the construction of facilities for servicing the lots on which the manufactured homes are to be affixed (including, at a minimum, the installation of utilities, the construction of streets, and either final site grading or the pouring of concrete pads) is completed before the effective date of the floodplain management regulations adopted by a community.

Expansion to an Existing Manufactured Home Park or Subdivision – The preparation of additional sites by the construction of facilities for servicing the lots on which the manufactured homes are to be affixed (including the installation of utilities, the construction of streets, and either final site grading or the pouring of concrete pads).

Flood or Flooding – A general and temporary condition of partial or complete inundation of normally dry land areas from (i) the overflow of inland waters or (ii) the unusual and rapid accumulation or runoff of surface waters from any source.

Flood Insurance Rate Map - An official map of a community, on which the Federal Emergency Management Agency (FEMA) has delineated both the areas of special flood hazards and the risk premium zones applicable to the community.

Flood Insurance Study - The official report provided by the Federal Emergency Management Agency. The report contains flood profiles, water surface elevation of the base flood, as well as the Flood Boundary-Floodway Map.

Flood Hazard Boundary Map - An official map of a community, issued by the Federal Emergency Management Agency, FEMA, where the boundaries of the flood, mud-slide (i.e., mud-flow) related erosion areas having special hazards have been designated as Zones A,M, and/or E. Where applicable, Flood Insurance Rate Maps (FIRM) have superceded Flood Hazard Boundary Maps.

Floodplain or Flood-prone Area – Any land area susceptible to being inundated by water from any source (see definition of flooding).

Floodplain Management – The operation of an overall program of corrective and preventive measures for reducing flood damage, including but not limited to emergency preparedness plans, flood control works and floodplain management regulations.

Floodplain Management Regulations – Land Use Regulations, building codes, health regulations, special purpose regulations (such as floodplain regulation, grading regulation and erosion control regulation) and other applications of police power. The term describes such state or local regulations, in any combination thereof, which provide standards for the purpose of flood damage prevention and reduction.

Flood Protection System – Those physical structural works for which funds have been authorized, appropriated, and expended and which have been constructed specifically to modify flooding in order to reduce the extent of the areas within a community subject to a "special flood hazard" and the extent of the depths of associated flooding. Such a system typically includes hurricane tidal barriers, dams, reservoirs, levees or dikes. These specialized flood modifying works are those constructed in conformance with sound engineering standards.

Flood Proofing – Any combination of structural and non-structural additions, changes, or adjustments to structures which reduce or eliminate flood damage to real estate or improved real property, water and sanitary facilities, structures and their contents.

Floodway (Regulatory Floodway) – The channel of a river or other watercourse and the adjacent land areas that must be reserved in order to discharge the base flood without cumulatively increasing the water surface elevation for than a designated height.

Functionally Dependent Use – A use which cannot perform its intended purpose unless it is located or carried out in close proximity to water. The term includes only docking facilities, port facilities that are necessary for the loading and unloading of cargo or passengers, as ship building and ship repair facilities, but does not include long-term storage or related manufacturing facilities.

Highest Adjacent Grade – The highest natural elevation of the ground surface prior to construction next to the proposed walls of a structure.

Historic Structure – Any structure that is:

1. Listed individually in the National Register of Historic Places (a listing maintained by the Department of Interior) or preliminarily determined by the Secretary of the Interior as meeting the requirements for individual listing on the National Register;
2. Certified or preliminarily determined by the Secretary of the Interior as contributing to the historical significance of a registered historic district or a district preliminarily determined by the Secretary to qualify as a registered historic district;
3. Individually listed on a state inventory of historic places in communities with historic preservation programs that have been certified either:
    a. by an approved state program as determined by the Secretary of the Interior or;
    b. directly by the Secretary of the Interior in states without approved programs.

Levee – A man-made structure, usually an earthen embankment, designed and constructed in accordance with sound engineering practices to contain, control, or divert the flow of water so as to provide protection from temporary flooding.

Levee System – A flood protection system which consists of a levee, or levees, and associated structures, such as closure and drainage devices, which are constructed and operated in accordance with sound engineering practices.

Lowest Floor - The lowest floor of the lowest enclosed area, including basement. An unfinished or flood-resistant enclosure, usable solely for parking of vehicles, building access, or storage, in an area other than a basement area is not considered a building's lowest floor, provided that such enclosure is not built so as to render the structure in violation of the applicable non-elevation design requirements of the applicable non-elevation design requirement of Section 60.3 of the National Flood Insurance Program regulations.

Manufactured Home – A structure transportable in one ore more sections, which is built on a permanent chassis and is designed for use with or without a permanent foundation

when connected to the required utilities. The term "manufactured home" does not include a "recreational vehicle."

Manufactured Home Park or Subdivision – A parcel (or contiguous parcels) of land divided into two or more manufactured home lots for rent or sale.

Mean Sea Level – For the purposes of the National Flood Insurance Program, the National Geodetic Vertical Datum (NGVD) of 1929 or other datum, to which base flood elevations shown on a community's Flood Insurance Rate Map are referenced.

New Construction – For the purpose of determining insurance rates, structures for which the "start of construction" commenced on or after the effective date of an initial FIRM or after December 31, 1974, whichever is later, and includes any subsequent improvements to such structures. For floodplain management purposes, "new construction" means structures for which the "start of construction" commenced on or after the effective date of a floodplain management regulation adopted by a community and includes any subsequent improvements to such structures.

New Manufactured Home Park or Subdivision – A manufactured home park or subdivision for which the construction of facilities for servicing the lots on which the manufactured homes are to be affixed (including at a minimum, the installation of utilities, the construction of streets, and either final site grading or the pouring of concrete pads) is completed on or after the effective date of floodplain management regulations adopted by a community.

Recreational Vehicle – A vehicle which is:

1. built on a single chassis;
2. 400 square feet or less when measured at the larges horizontal projections;
3. designed to be self-propelled or permanently towable by a light duty truck; and
4. designed primarily not for use as a permanent dwelling but as temporary living quarters for recreational, camping, travel, or seasonal use.

Start of Construction – Including substantial improvement, the date the building permit was issued, provided the actual start of construction, repair, reconstruction, rehabilitation, addition, placement, or other improvement was within 180 days of the permit date. The actual start means either the first placement of permanent construction of a structure on a site, such as the pouring of slab or footings, the installation of piles, the construction of columns, or any work beyond the stage of excavation; or the placement of a manufactured home on a foundation. Permanent construction does not include land preparation, such as clearing, grading and filling; nor does it include the installation of streets and/or walkways; nor does it include excavation for basement, footings, piers or foundations or the erection of temporary forms; nor does it include the installation on the property of accessory buildings, such as garages or sheds not occupied ad dwelling units

or not part of the main structure. For a substantial improvement, the actual start of construction means the first alteration of any wall ceiling, floor, or other structural part of a building, whether or not that alteration affects the external dimensions of the building.

Structure – A walled and roofed building, including a gas or liquid storage tank, that is principally above ground, as well as a manufactured home.

Substantial Damage – Damage of any origin sustained by a structure whereby the cost of restoring the structure to its before damaged condition would equal or exceed 50 percent of the market value of the structure before the damage occurred.

Substantial Improvement – Any reconstruction, rehabilitation, addition, or other improvement of a structure, the cost of which equals or exceeds 50 percent of the market value of the structure before "start of construction" of the improvement. This includes structures, which have incurred "substantial damage," regardless of the actual repair work performed. The term does not however, include either:

1. Any project for improvement of a structure to correct existing violations of state or local health sanitary, or safety code specifications which have been identified by the local code enforcement official and which are the minimum necessary conditions or
2. Any alteration of a "historic structure," provided that the alteration will not preclude the structure's continued designation as a "historic structure."

Variance – A grant of relief to a person from the requirement of these Land Use Regulations when specific enforcement would result in unnecessary hardship. A variance, therefore, permits construction or development in a manner otherwise prohibited by these regulations. (For full requirements see Section 60.6 of the National Flood Insurance Program regulations.)

Violation – The failure of a structure or other development to be fully compliant with the community's floodplain management regulations. A structure or other development without the elevation certificate, other certifications, or other evidence of compliance required in Section 60.3(b)(5), (c)(4), (c)(10), (d)(3), (e)(2), (e)(4), or (e)(5) is presumed to be in violation until such time as that documentation is provided.

Water Surface Elevation – The height, in relation to the National Geodetic Vertical Datum (NGVD) of 1929 (or other datum, where specified), of floods of various magnitudes and frequencies in the floodplains of coastal or riverine areas.

E. National Flood Insurance Program

1. Statutory Authorization, Findings of Fact, Purpose and Objectives:

a. Statutory Authorization. The Legislature of the State of Wyoming has in Section 18-5--105 et seq. Wyoming Statutes Annotated, 1977 edition as amended, delegated the responsibility to local governmental units to adopt regulations designed to promote the public health, safety, and general welfare of its citizenry. Therefore, the Board of County Commissioners of Lincoln County, Wyoming does resolve as follows:

b. Findings of Fact

1. The flood hazard areas of Lincoln County are subject to periodic inundation which results in loss of life and property, health and safety hazards, disruption of commerce and governmental services, extraordinary public expenditures for flood protection and relief, and impairment of the tax base, all of which adversely affect the public health, safety and general welfare.
2. These flood losses are caused by the cumulative effect of obstructions in floodplains which increase flood heights and velocities, and by the occupancy of flood hazard areas by uses vulnerable to flood and hazardous to other lands because they are inadequately elevated, floodproofed or otherwise unprotected from flood damage.

c. Statement of Purpose. It is the purpose of these Land Use Regulations to promote the public health, safety, and general welfare, and to minimize public and private losses due to flood conditions in specific areas by provisions designed:

1. To protect human life and health;
2. To minimize expenditures of public money for costly flood control projects;
3. To minimize the need for rescue and relief efforts associated with flooding and generally undertaken at the expense of the general public;
4. To minimize prolonged business interruptions;
5. To minimize damage to public facilities and utilities, such as water and gas mains, electric, telephone and sewer lines, streets and bridges located in floodplains;
6. To help maintain a stable tax base by providing for the sound use and development of floodprone areas in such a manner as to minimize future flood blight areas;
7. To insure that potential buyers are notified that property is in a flood area; and
8. To ensure that those who occupy floodplain areas assume responsibility for their actions.

d. Methods of Reducing Flood Losses. In order to accomplish its purposes, these Land Use Regulations include methods and provisions for:

1. Restricting or prohibiting uses which are dangerous to health, safety, and property in times of flood, or cause excessive increases in flood heights or velocities;
2. Requiring that uses vulnerable to floods, including facilities which serve such uses, be protected against flood damage at the time of initial construction;
3. Controlling the alteration of natural flood plains, stream channels, and natural protective barriers, which help accommodate or channel flood waters;
4. Controlling filling, grading, dredging, and other development which may increase flood damage; and,
5. Preventing or regulating the construction of flood barriers which will unnaturally divert flood waters or which may increase flood hazards to other lands.

F. General Provisions

1. The provisions of the flood overlay regulations shall apply to all areas of special flood hazard within the jurisdiction of Lincoln County, Wyoming.
2. Basis for Establishing the Areas of Special Flood Hazard. The areas of special flood hazard identified by the Federal Emergency Management Agency (FEMA) in scientific and engineering reports entitled Flood Insurance Study for Lincoln County, Wyoming Unincorporated Areas, dated, 21 September 1998 and Flood Insurance Study for Lincoln County, Wyoming Unincorporated Areas, dated June 17, 2003 with the following accompanying Flood Insurance Rate Maps (FIRM) for Lincoln County, Wyoming Unincorporated Areas (Community Number 560032): Panels IND0A, 100C, 250C, 650B, 675B, 775B, 785C, 800C, 850B, 900B, 925B, 975B, 1050B, 1080B, 1081B, 1083B, 1090B, 1095B, 1125B, 1150B, 1275B, 1370C, 1485C, 1495C, 1610C, 1640C, and 1755C, are hereby and declared to be a part of these Land Use Regulations. These studies and maps are attached at the end of Appendix C. In addition, Flood Hazard Boundary information from earlier maps for otherwise unmapped areas has been incorporated into the Flood Plain Comprehensive Plan Map No. 11.
3. Development permits, as defined by these Land Use Regulations, shall be required to ensure conformance with the provisions of the flood overlay regulations.

4. No structure shall hereafter be located, altered, or have its use changed without full compliance with the terms of these Land Use Regulations and other applicable regulations.
5. This regulation is not intended to repeal, abrogate, or impair any existing easements, covenants, or deed restrictions. However, where these Land Use Regulations and another regulation, easement, covenant, or deed restriction conflict or overlap, whichever imposes the more stringent restrictions shall prevail.
6. In the interpretation and application of these Land Use Regulations, all provisions shall be:
   a. considered as minimum requirements;
   b. liberally construed in favor of the governing body; and
   c. deemed neither to limit nor repeal any other powers granted under State statutes.

7. The degree of flood protection required by these Land Use Regulations is considered reasonable for regulatory purposes and is based on scientific and engineering considerations. On rare occasions greater floods can and will occur and flood heights may be increased by man-made or natural causes. These regulations do not imply that land outside the areas of special flood hazards or uses permitted within such areas will be free from flooding or flood damages. These regulations shall not create liability on the part of the community or any official or employee thereof for any flood damages that result from reliance on these Land Use Regulations or any administrative decision lawfully made thereunder.

G. Administration

1. The Director of the Office of Planning and Development and the Senior Planner are hereby appointed to administer and implement the provisions of these Land Use Regulations and other appropriate sections of 44 CFR (National Flood Insurance Program Regulations) pertaining to floodplain management.

2. The duties of the Administrator shall include, but are not limited to, the following:
   a. Maintain and hold open for public inspection all records pertaining to the provisions of these Land Use Regulations.
   b. Review permit application(s) to determine whether proposed building site, including the placement of manufactured homes, will be reasonably safe from flooding.
   c. Review, approve or deny all applications for development permits required by adoption of these Land Use Regulations.

d. Review permits for proposed development to assure that all necessary permits have been received from those governmental agencies from which prior approval is required by Federal or State law, including Section 404 of the Federal Water Pollution Control Act Amendments of 1972, 33 U.S.C. 1334.
e. Where interpretation is needed as to the exact location of the boundaries of the areas of special flood hazards (for example, where there appears to be a conflict between a mapped boundary and actual field conditions) the Administrator shall make the necessary interpretation.
f. Notify, in riverine situations, adjacent communities and the State Coordinating Agency which is the Wyoming Emergency Management Agency, prior to any alteration or relocation of a watercourse, and submit evidence of such notification to the Federal Emergency Management Agency.
g. Assure that the flood carrying capacity within the altered or relocated portion of any watercourse is maintained.
h. When base flood elevation data has not been provided in accordance with Section F, Paragraph 2, the Administrator shall obtain, review and reasonably utilize any base flood elevation data and floodway data available from a Federal, State or other source, in order to administer the provisions of Section I.
i. When a regulatory floodway has not been designated, the Administrator must require that no new construction, substantial improvements, or other development (including fill) shall be permitted within Zones A1-30 and AE on the community's FIRM unless it is demonstrated that the cumulative effect of the proposed development, when combined with all other existing and anticipated development, will not increase the water surface elevation of the base flood more than one foot at any point within the community.
j. Under the provisions of 44 CFR Chapter 1, Section 65.12, of the National Flood Insurance Program regulations, a community may approve certain development in Zones A1-30, AE, AH, on the community's FIRM which increases the water surface elevation of the base flood by more than one foot, provided that the community first applies for a conditional FIRM revision through FEMA (Conditional Letter of Map Revision).

3. Permit Procedures. Application for a Development permit shall be presented to the Administrator on forms furnished by him/her and may include, but not be limited to, plans in duplicate drawn to scale showing the location, dimensions, and elevation of proposed landscape alterations, existing and proposed structures, including the placement of manufactured homes and the location of the foregoing in relation to areas of special

flood hazard. Additionally, the following information is required:

a. Elevation (in relation to mean sea level), of the lowest floor (including basement) of all new and substantially improved structures;
b. Elevation in relation to mean sea level to which any nonresidential structure shall be floodproofed;
c. A certificate from a professional engineer or architect that the nonresidential floodproofed structure shall meet the floodproofing criteria of Section I, Paragraph 2.b.
d. Description of the extent to which any watercourse or natural drainage will be altered or relocated as a result of proposed development.
e. Maintain a record of all such information in accordance with Section G, Paragraph 2.a.

4. Approval or denial of a Development Permit by the Administrator shall be based on all of the provisions of these Land Use Regulations and the following relevant factors:
   a. The danger to life and property due to flooding or erosion damage;
   b. The susceptibility of the proposed facility and its contents to flood damage and the effect of such damage on the individual owner;
   c. The danger that materials may be swept onto other lands to the injury of others;
   d. The compatibility of the proposed use with existing and anticipated development;
   e. The safety of access to the property in times of flood for ordinary and emergency vehicles;
   f. The costs of providing governmental services during and after flood conditions including maintenance and repair of streets and bridges, and public utilities and facilities such as sewer, gas, electrical and water systems;
   g. The expected heights, velocity, duration, rate of rise and sediment transport of the flood waters and the effects of wave action, if applicable, expected at the site;
   h. The necessity to the facility of a waterfront location, where applicable;
   i. The availability of alternative locations, not subject to flooding or erosion damage, for the proposed use;
   j. The relationship of the proposed use to the comprehensive plan for that area.

H. Variance Procedures

1. The Board of County Commissioners shall hear and render judgement on requests for variances from the requirements of these flood regulations.
2. The Board shall hear and render judgement on an appeal only when it is

alleged there is an error in any requirement, decision, or determination made by the Administrator in the enforcement or administration of these regulations.

3. Any person aggrieved by the decision of the Board may appeal such decision in the courts of competent jurisdiction.
4. The administrator shall maintain a record of all actions involving an appeal and shall report variances to the Federal Emergency Management Agency upon request.
5. Variances may be issued for the reconstruction, rehabilitation or restoration of structures listed on the National Register of Historic Places or the State Inventory of Historic Places without regard to the procedures set forth in the remainder of this Section.
6. Variances may be issued for new construction and substantial improvements to be erected on a lot of one-half acre or less in size contiguous to and surrounded by lots with existing structures constructed below the base flood level, providing the relevant factors in Section I, paragraph 1. have been fully considered. As the lot size increases beyond the one-half acre, the technical justification required for issuing the variance increases.
7. Upon consideration of the factors noted above and the intent of this ordinance, the Board may attach such conditions to the granting of variances as it deems necessary to further the purpose and objectives of these regulations (Section E., paragraph 1.c).
8. Variances shall not be issued within any designated floodway if any increase in flood levels during the base flood discharge would result.
9. Variances may be issued for the repair or rehabilitation of historic structures upon a determination that the proposed repair or rehabilitation will not preclude the structure's continued designation as a historic structure and the variance is the minimum necessary to preserve the historic character and design of the structure.
10. Prerequisites for granting variances:
    a. Variances shall only be issued upon a determination that the variance is the minimum necessary, considering the flood hazard, to afford relief.
    b. Variances shall only be issued upon:
        1. showing a good and sufficient cause;
        2. a determination that failure to grant the variance would result in exceptional hardship to the applicant, and
        3. a determination that the granting of a variance will not result in increased flood heights, additional threats to public safety, extraordinary public expense, create nuisances, cause fraud on or victimization of the public, or conflict with existing local laws or regulations.
    c. Any applicant to whom a variance is granted shall be given written notice that the structure will be permitted to be built with the lowest

floor elevation below the base flood elevation, and that the cost of flood insurance will be commensurate with the risk resulting from the reduced lowest floor elevation.

11. Variances may be issued by a community for new construction and substantial improvements and for other development necessary for the conduct of a functionally dependent use provided that:
    a. the criteria outlined in Section G. paragraph 4. a-j are met, and
    b. the structure or other development is protected by methods that minimize flood damages during the base flood and create no additional threats to public safety.

I. Provisions for Flood Hazard Reduction

1. **General Standards** - In all areas of special flood hazards the following provisions are required for all new construction and substantial improvements:
    a. All new construction or substantial improvements shall be designed (or modified) and adequately anchored to prevent flotation, collapse or lateral movement of the structure resulting from hydrodynamic and hydrostatic loads, including the effects of buoyancy;
    b. All new construction or substantial improvements shall be constructed by methods and practices that minimize flood damage;
    c. All new construction or substantial improvements shall be constructed with materials resistant to flood damage;
    d. All new construction or substantial improvements shall be constructed with electrical, heating, ventilation, plumbing, and air conditioning equipment and other service facilities that are designed and/or located so as to prevent water from entering or accumulating within the components during conditions of flooding;
    e. All new and replacement water supply systems shall be designed to minimize or eliminate infiltration of flood waters into the system;
    f. New and replacement sanitary sewage systems shall be designed to minimize or eliminate infiltration of flood waters into the system and discharge from the systems into flood waters; and,
    g. On-site waste disposal systems shall be located to avoid impairment to them or contamination from them during flooding.

2. **Specific Standards** - In all areas of special flood hazards where base flood elevation data has been provided as set forth in (i) Section F., paragraph 2, or (ii) Section G., paragraph 2.h, the following provisions are required:
    a. Residential Construction – new construction and substantial improvement of any residential structure shall have the lowest floor (including basement), elevated to or above the base flood elevation. A registered professional engineer, architect, or land surveyor shall submit a certification to the Administrator that the standard of this subsection as proposed in Section G., paragraph 3.a. is satisfied. Where Base Flood Elevations have not been established in FIRM Zone (A) areas, the lowest floor shall be elevated at least 18 inches above highest surrounding grade.
    b. Nonresidential Construction – new construction and substantial improvements of any commercial, industrial or other nonresidential structure shall either have the lowest floor (including basement) elevated to or above the baseflood level or together with attendant utility and sanitary facilities, be designed so that below the base flood level the structure is watertight with walls substantially impermeable to the passage of water and with structural components having the capability of resisting hydrostatic and hydrodynamic loads and effects of buoyancy. A registered professional engineer or architect shall develop and/or review structural design, specifications, and plans for the construction and shall certify that the design and methods of construction are in accordance with accepted standards of practice as outlined in this subsection. A record of such certification which includes the specific elevation (in relation to mean sea level) to which such structures are floodproofed shall be maintained by the Administrator.

c. Enclosures –
    1. New construction and substantial improvements, with fully enclosed areas below the lowest floor that are usable solely for parking of vehicles, building access or storage in an area other than a basement and which are subject to flooding shall be designed to automatically equalize hydrostatic flood forces on exterior walls by allowing for the entry and exit of floodwaters. Designs for meeting this requirement must either be certified by a registered professional engineer or architect or meet or exceed the following minimum criteria:
        a. A minimum of two openings having a total net area of not less than one square inch for every square foot of enclosed area subject to flooding shall be provided.

b. The bottom of all openings shall be no higher than one foot above grade.
c. Openings may be equipped with screens, louvers, valves, or other coverings or devices provided that they permit the automatic entry and exit of floodwaters.

2. Crawlspaces – In addition to the requirements contained in the paragraph above, new construction and substantial improvements of any below grade crawlspace shall:
   a. have the interior grade elevation that is below base flood elevation no lower than two (2) feet below the lowest adjacent grade;
   b. have the height of the below grade crawlspace measured from the interior grade of the crawlspace to the top of the foundation wall, not exceed four (4) feet at any point;
   c. have an adequate drainage system that allows floodwaters to drain from the interior area of the crawlspace following a flood; be anchored to prevent flotation, collapse, or lateral movement of the structure and be capable of resisting the hydrostatic and hydrodynamic loads;
   d. be constructed with materials and utility equipment resistant to flood damage;
   e. be constructed using methods and practices that minimize flood damage;
   f. be constructed with electrical, heating, ventilation, plumbing and air conditioning equipment and other service facilities that are designed and/or located so as to prevent water from entering or accumulating within the components during conditions of flooding.

d. Manufactured Homes
   1. Require that all manufactured homes to be placed within Zone A on a community's FHBM or FIRM shall be installed using methods and practices which minimize flood damage. For the purposes of this requirement, manufactured homes must be elevated and anchored to resist flotation, collapse, or lateral movement. Methods of anchoring may include, but are not limited to, use of over-the-top or frame ties to ground anchors. This requirement is in addition to applicable State and local anchoring requirements for resisting wind forces.
   2. Require that manufactured homes that are placed or substantially improved within Zones A1-30, AH, and AE on the community's FIRM on sites (i) outside of a manufactured home park or subdivision, (ii) in a new manufactured home park or subdivision, (iii) in an expansion to an existing manufactured home park or

subdivision on which a manufactured home has incurred "substantial damage" as a result of a flood, be elevated on a permanent foundation such that the lowest floor of the manufactured home is elevated to or above the base flood elevation and be securely anchored to an adequately anchored foundation system to resist flotation, collapse, and lateral movement.

3. Require that manufactured homes be placed or substantially improved on sites in an existing manufactured home park or subdivision with Zones A1-30, AH, and AE on the community's FIRM that are not subject to the provisions of paragraph d. of this section be elevated so that either:

   a. the lowest floor of the manufactured home is at or above the base flood elevation, or
   b. the manufactured home chassis is supported by reinforced piers or other foundation elements of at least equivalent strength that are no less than 36 inches in height above grade and be securely anchored to an adequately anchored foundation system to resist flotation, collapse, and lateral movement.

e. Recreational Vehicles – Require that recreational vehicles placed on sites within Zones A1-30, AH, and AE on the community's FIRM either:

1. be on the site for fewer that 180 consecutive days,
2. be fully licensed and ready for highway use, or
3. meet the permit requirements of Section G., paragraph 3.a, and the elevation and anchoring requirements for "manufactured homes" in paragraph 2.d. of this section. A recreational vehicle is ready for highway use if it is on its wheels or jacking system, is attached to the site only by quick disconnect type utilities and security devices, and has no permanently attached additions.

3. **Standards for Subdivision Proposals** – New subdivision proposals shall not include: building envelopes within Zones A, AE areas; use floodplain acreage for lot density calculations (see Table 6.1); and, place any buildings in floodplain portions of subdivision lots.

4. **Standards for Areas of Shallow Flooding (AO/AH Zones)** – Located within the areas of special flood hazard established in Section F., paragraph 2, are areas designated as shallow flooding. These areas have special flood hazards associated with base flood depths of 1 to 3 feet where a clearly defined channel does not exist and where the path of flooding is unpredictable and where velocity flow may be evident. Such flooding is characterized by ponding or sheet flow; therefore, the following provisions apply:

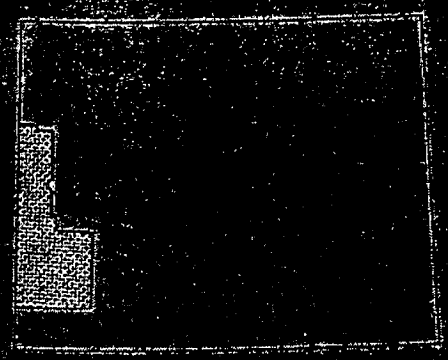
a. All new construction and substantial improvements of residential structures shall have the lowest floor (including basement) elevated above the highest adjacent grade at least as high as the depth number specified in feet on the community's FIRM (at least two feet if no depth number is specified).
b. All new construction and substantial improvements of non-residential structures shall:
    1. have the lowest floor (including basement) elevated above the highest adjacent grade at least as high as the depth number specified in feet on the community's FIRM (at least two feet if no depth number is specified), or;
    2. together with attendant utility and sanitary facilities be designed so that below the base flood level the structure is watertight with walls substantially impermeable to the passage of water and with structural components having the capability of resisting hydrostatic and hydrodynamic loads of effects of buoyancy.
c. A registered professional engineer or architect shall submit a certification to the Administrator that the standards, as proposed in Section I., paragraph 2.b., are satisfied.
d. Require within Zones AH or AO adequate drainage paths around structures on slopes, to guide flood waters around and away from proposed structures.

5. **Floodways** – Located within areas of special flood hazard established in Section F., paragraph 2, are areas designated as floodways. Since the floodway is an extremely hazardous area due to the velocity of flood waters which carry debris, potential projectiles and erosion potential, the following provisions shall apply:
    a. Encroachments are prohibited, including fill, new construction, substantial improvements and other development within the adopted regulatory floodway unless it has been demonstrated through hydrologic and hydraulic analyses performed in accordance with standard engineering practice that the proposed encroachment would not result in any increase in flood levels within the community during the occurrence of the base flood discharge.

    b. If Section I., paragraph 5.a. above is satisfied, all new construction and substantial improvements shall comply with all applicable flood hazard reduction provisions of Section I.
    c. When a regulatory floodway has not been designated, the Administrator must require that no new construction, substantial improvements, or other development (including fill) shall be permitted within Zones A1-30 and AE on the community's FIRM, unless it is demonstrated that the cumulative effect of the proposed development, when combined with all other existing and anticipated development, will not increase the water surface elevation of the base flood more than one foot at any point within the community.

d. Under the provisions of 44 CFR Chapter 1, Section 65.12, of the National Flood Insurance regulations, a community may permit encroachments within the adopted regulatory floodway that would result in an increase in base flood elevations, provided that the community first applies for a conditional FIRM and floodway revision through FEMA (Conditional Letter of Map Revision).

FLOOD INSURANCE STUDY



LINCOLN COUNTY, WYOMING
UNINCORPORATED AREAS

REVISED: SEPTEMBER 21, 1996

Federal Emergency Management Agency

COMMUNITY NUMBER - 560032

NOTICE TO
FLOOD INSURANCE STUDY USERS

Communities participating in the National Flood Insurance Program have established repositories of flood hazard data for flood plain management and flood insurance purposes. This Flood Insurance Study may not contain all data available within the repository. It is advisable to contact the community repository for any additional data.

This publication incorporates revisions to the original Flood Insurance Study. These revisions are presented in Section 9.0.

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1.0 INTRODUCTION

1.1 Purpose of Study

The purpose of this Flood Insurance Study is to investigate the existence and severity of flood hazards in the unincorporated areas of Lincoln County, Wyoming, and to aid in the administration of the National Flood Insurance Act of 1968 and the Flood Disaster Protection Act of 1973. Initial use of this information will be to convert Lincoln County to the regular program of flood insurance by the Federal Insurance Administration. Further use of the information will be made by local and regional planners in their efforts to promote sound land use and flood plain development.

1.2 Coordination

Streams requiring detailed studies were identified in a meeting attended by county planners and representatives of the Federal Insurance Administration and the study contractor on April 23, 1976. A second coordination meeting was held with county planners on September 20, 1976, when objectives of the study were discussed.

Federal agencies contacted during the study included the U.S. Geological Survey; the U.S. Soil Conservation Service; the U.S. Army Corps of Engineers; and the National Oceanic Atmospheric Administration, National Weather Service. Coordination with the State of Wyoming included the State Engineer and the Director of Civil Defense.

A final coordination meeting was held on July 6, 1977, in the Lincoln County courthouse. This was a combined meeting with the incorporated Towns of Diamondville and Kemmerer, as well as unincorporated Lincoln County. Attending the meeting were representatives of the Towns of Diamondville and Kemmerer, Lincoln County, the Federal Insurance Administration, and the study contractor. No objections to this study were raised as a result of the meeting.

1.3 Authority and Acknowledgments

The source of authority for this Flood Insurance Study is the National Flood Insurance Act of 1968, as amended.

The hydrologic and hydraulic analyses for this study were performed by Nelson, Haley, Patterson, and Quirk, Inc., for the Federal Insurance Administration, under Contract No. H-3993. This work, which was completed in May 1977, covered all significant flooding sources affecting the unincorporated areas of Lincoln County, Wyoming.

2.0 AREA STUDIED

2.1 Scope of Study

This Flood Insurance Study covers the unincorporated areas of Lincoln County, Wyoming. The area of study is shown on the Vicinity Map (Figure 1). Not included in this study are the incorporated Towns of Afton, Cokeville, Kemmerer, Thayne, Diamondville, and Opal, Wyoming.

Floods caused by the overflow of Hams Fork from the north line of Section 12, Township 21 North, Range 116 west of the 6th principal meridian to the northern corporate limits of Kemmerer were studied in detail because of historical flooding and potential flood hazard.

Approximate study methods were used for the following streams and their major tributaries for limited portions or the entire length within the study area; Bear River, Blacks Fork, Bridger Creek, Green River, Hams Fork, Labarge Creek, Salt River, Sevenmile Wash, Shake River, Twin Creek, and Willow Creek. These streams were studied in this manner due to the lack of development in their flood plains.

The scope and methods of study were proposed to and agreed upon by representatives of the Federal Insurance Administration and Lincoln County, Wyoming.

Those areas studied by detailed methods were chosen with consideration given to all proposed construction and forecasted development through 1982.

2.2 Community Description

Lincoln County is located in southwest Wyoming and is bordered on the north by Teton and Sublette Counties; on the east by Sweetwater County; on the south by Uinta County, and on the west by Rich County, Utah, and Bear Lake, Caribou, and Bonneville Counties, Idaho.

The area studied in detail is occupied, for the most part, by the Town of Frontier. The Town of Frontier is situated on the floor of a valley and is 1 mile north of Kemmerer, 50 miles northeast of Evanston, 71 miles northwest of Green River, and in south-central Lincoln County.

The Town of Frontier was originally established as a coal mining community. Rich coal veins were discovered in 1868, but the Frontier Mine was not opened until 1897. This mine became one of the best-paying coal mines in the area. The coal boom lasted approximately 40 years before its eventual decline. Renewed interest in coal as an energy source has stimulated the economy of the area.

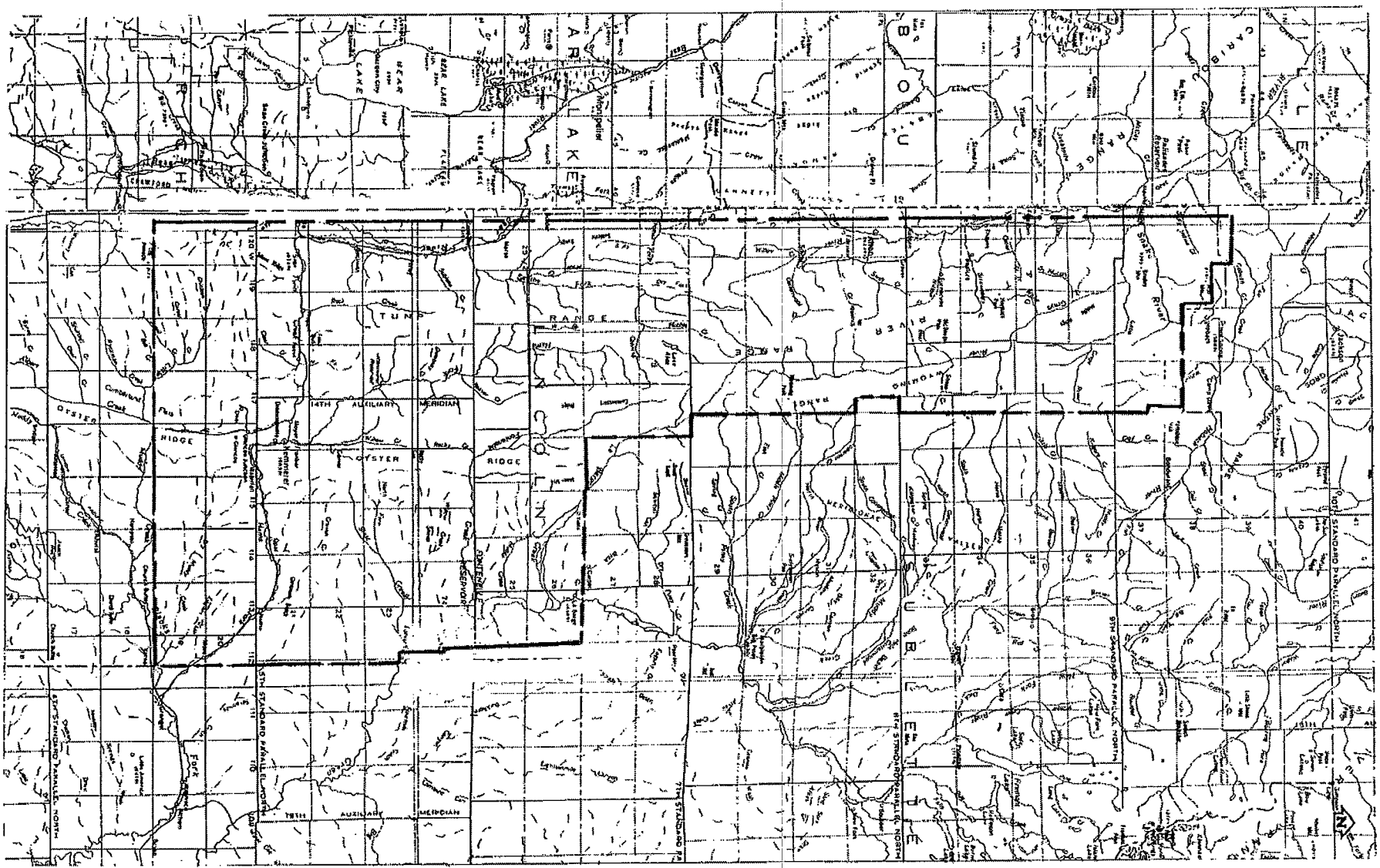


FIGURE 1

FEDERAL EMERGENCY MANAGEMENT AGENCY

LINCOLN COUNTY, WY

(UNINCORPORATED AREAS)

APPROXIMATE SCALE

16 0 16 32 48 MILES

VICINITY MAP

Frontier remains a mining community. It has changed from a self-sufficient community to a suburb of Kemmerer, a nearby ranching community. The population of Frontier declined from 700 (1950 census) to 300 (1970 census).

Hams Fork flows from northwest of Frontier. Willow Creek joins Hams Fork approximately 3 miles north of Kemmerer. Hams Fork flows south through Frontier, Kemmerer, Diamondville, and eventually to its confluence with Green River.

The relief pattern of the State of Wyoming is one of deeply eroded mountain ranges separated by large basinlike depressions. The drainage basin of Hams Fork is a miniature of this pattern. The hills and ridges that define this basin were formed from the upheaval of sedimentary formations which have been eroded over the eons. The topsoil of these hills is light brown.

Frontier is situated at an altitude of 6954 feet, and is located in a flat-bottom river valley. The town is surrounded by low hills, which afford some protection from harsher weather. Because of its altitude, the town is somewhat cooler throughout the year. The maximum temperatures range from 81.2°F in July to 6.8°F in January. Average yearly precipitation is approximately 8.6 inches.

Ground cover in the hills surrounding Frontier is sparse and typical of an arid climate: sagebrush, a variety of cactus, mesquite, and gramma grass. A variety of large trees exists in Frontier, with cottonwood trees being the dominant type. Moving closer to Hams Fork, the vegetation becomes more dense and generally taller.

2.3 Principal Flood Problems

Damage resulting from flooding is minor, with a small amount of property loss. Floods occurring in 1950 and 1971 were due to heavy winter snows followed by an extremely mild spring. In 1950, the dam at Kemmerer Reservoir took the brunt of the floodwaters. Meadows along Hams Fork were flooded, but no serious damage to houses or roads was reported. The dam at Kemmerer Reservoir was reinforced to ensure its safety. Temporary dikes were built to protect the lower areas of Frontier. The 2450 cubic feet per second (cfs) of discharge of the 1950 flood, measured at Hams Fork, was representative of a 25-year frequency flood (Reference 1).

In 1971, an unusual amount of snow followed by a warm spring was again the cause for concern over high water. Fields on ranches in the valley were under water, but no damages were reported to residences. The Air National Guard flew in 1000 sandbags for volunteers to build temporary dikes to curb the high waters. Equipment and operators were volunteered by several construction companies in the area. The 1971 flood had a discharge of 2120 cfs and was representative of a 10-year flood.

2.4 Flood Protection Measures

A permanent flood protection measure is in the form of a minor levee system along Hams Fork. Temporary protection is afforded by volunteers building temporary dikes and sandbagging.

3.0. ENGINEERING METHODS

For the flooding sources studied in detail in the county, standard hydrologic and hydraulic study methods were used to determine the flood hazard data required for this study. Flood events of a magnitude which are expected to be equalled or exceeded once on the average during any 10-, 50-, 100-, or 500-year period (recurrence interval) have been selected as having special significance for flood plain management and for flood insurance premium rates. These events, commonly termed the 10-, 50-, 100-, and 500-year floods, have a 10, 2, 1, and 0.2 percent chance, respectively, of being equalled or exceeded during any year. Although the recurrence interval represents the long term average period between floods of a specific magnitude, rare floods could occur at short intervals or even within the same year. The risk of experiencing a rare flood increases when periods greater than 1 year are considered. For example, the risk of having a flood which equals or exceeds the 100-year flood (1 percent chance of annual occurrence) in any 50-year period is approximately 40 percent (4 in 10), and, for any 90-year period, the risk increases to approximately 60 percent (6 in 10). The analyses reported here reflect flooding potentials based on conditions existing in the county at the time of completion of this study. Maps and flood elevations will be amended periodically to reflect future changes.

3.1 Hydrologic Analyses

Hydrologic analyses were carried out to establish the peak discharge-frequency relationships for floods of the selected recurrence intervals for each stream studied in detail in the county.

For Hams Fork, floodflow-frequency data were based on statistical analyses of discharge records at several gaging stations in the Lincoln County area operated by the U.S. Geological Survey (References 1, 2, 3, and 4). Locations and lengths of records for these gages are

1. 2.0 miles downstream from Pole Creek, 4.6 miles upstream from Taylor Creek, and 22 miles northwest of Frontier; period of record from October 1952 to present

2. 800 feet upstream from U.S. Highway 189 bridge, 1.5 miles upstream from Willow Creek, and 3.5 miles northwest of Frontier; period of record from May 1945 to present

3. At U.S. Highway 189 bridge at Diamondville, 4 miles downstream from Willow Creek; period of record from October 1926 to 1949

The analyses followed the standard log-Pearson Type III method as outlined by the U.S. Water Resources Council (Reference 5). To obtain peak discharges for the specified recurrence intervals, a simple regression analysis was used regressing peak discharges onto drainage basin size measured in square miles.

There are several small lakes and reservoirs that have little flood regulation capacity. These reservoirs may attenuate peak discharges immediately downstream, but will have little effect in the detailed study area.

Peak discharge-drainage area relationships for Hams, Smith, and South Forks and Spring Creek are shown in Table 1, "Summary of Discharges."

3.2 Hydraulic Analyses

Analyses of the hydraulic characteristics of streams in the county were carried out to provide estimates of the elevations of floods of the selected recurrence intervals along each stream studied in the county.

Water-surface elevations were developed using the U.S. Army Corps of Engineers HEC-2 computer program (Reference 6). Profiles were determined for the 10-, 50-, 100-, and 500-year floods.

Cross-section data for the area were obtained by field-survey methods and all bridges were surveyed to obtain elevation data and structural geometry.

Locations of selected cross sections used in the hydraulic analyses are shown on the Flood Profiles (Exhibit 1). For stream segments for which a floodway is computed (Section 4.2), selected cross-section locations are also shown on the Flood Boundary and Floodway Map (Exhibit 2).

Table 1. Summary of Discharges

Flooding Source and Location	Drainage Area (Square Miles)	Peak Discharges (Cubic Feet per Second) 10-Year	50-Year	100-Year	500-Year
Hams Fork Frontier Area	379	2,709	3,434	3,708	4,276
Smiths Fork Town of Cokeville Area	275	--[1]	--[1]	1,610	--[1]
South Fork Town of Cokeville Area	275	--[1]	--[1]	125	--[1]
Spring Creek Town of Cokeville Area	280	--[1]	--[1]	465	--[1]

[1]Not computed

Roughness coefficients (Manning's "n") were estimated by field inspection and photographs at each cross section. Roughness values for the main channel ranged from 0.029 to 0.044, depending on channel condition and obstructions; roughness values for the flood plain ranged from 0.028 to 0.138, depending on vegetation, irregularity, obstructions, and meandering.

Starting water-surface elevations were calculated using normal depth analysis.

Flood profiles were drawn showing computed water-surface elevations to an accuracy of 0.5 foot for floods of the selected recurrence intervals (Exhibit 1).

All elevations are referenced to the National Geodetic Vertical Datum of 1929 (NGVD). Elevation reference marks used in the study are shown on the maps.

4.0 FLOOD PLAIN MANAGEMENT APPLICATIONS

A prime purpose of the National Flood Insurance Program is to encourage State and local governments to adopt sound flood plain management programs. Each Flood Insurance Study, therefore, includes a flood boundary map designed to assist communities in developing sound flood plain management measures.

4.1 Flood Boundaries

In order to provide a national standard without regional discrimination, the 100-year flood has been adopted by the Federal Insurance Administration as the base flood for purposes of flood plain management measures. The 500-year flood is employed to indicate additional areas of flood risk in the county. For each stream studied in detail, the boundaries of the 100- and 500-year floods have been delineated using the flood elevations determined at each cross section; between cross sections, the boundaries were developed photogrammetrically, using aerial photographs at a scale of 1:4800 (Reference 7).

In cases where the 100- and 500-year flood boundaries are close together, only the 100-year flood boundary has been shown.

Approximate flood boundaries in some portions of the study area were taken from the Federal Insurance Administration's Flood Hazard Boundary Map (Reference 8).

Flood boundaries for the 100- and 500-year floods are shown on the Flood Boundary and Floodway Map (Exhibit 2).

Small areas within the flood boundaries may lie above the flood elevations and, therefore, not be subject to flooding; owing to limitations of the map scale, such areas are not shown.

4.2 Floodways

Encroachment on flood plains, such as artificial fill, reduces the flood-carrying capacity and increases flood heights, thus increasing flood hazards in areas beyond the encroachment itself. One aspect of flood plain management involves balancing the economic gain from flood plain development against the resulting increase in flood hazard. For purposes of the National Flood Insurance Program, the concept of a floodway is used as a tool to assist local communities in this aspect of flood plain management. Under this concept, the area of the 100-year flood is divided into a floodway and a floodway fringe. The floodway is the channel of a stream, plus any adjacent flood plain areas, that must be kept free of encroachment in order that the 100-year flood be carried without substantial increases in flood heights. As minimum standards, the Federal Insurance Administration limits such increases in flood heights to 1.0 foot, provided that hazardous velocities are not produced.

The floodway delineated for this study was computed on the basis of equal conveyance reduction from each side of the flood plain. The results of these computations are tabulated at selected cross sections for each stream segment for which a floodway is computed (Table 2).

As shown on the Flood Boundary and Floodway Map (Exhibit 2), the floodway boundaries were determined at cross sections; between cross sections, the boundaries were interpolated. In cases where the floodway and 100-year flood boundaries are close together, only the floodway boundary has been shown.

The area between the floodway and the boundary of the 100-year flood is termed the floodway fringe. The floodway fringe thus encompasses the portion of the flood plain that could be completely obstructed without increasing the water-surface elevation of the 100-year flood more than 1.0 foot at any point. Typical relationships between the floodway and the floodway fringe and their significance to flood plain development are shown in Figure 2.

FLOODING SOURCE	PANEL[1]	ELEVATION DIFFERENCE[2] BETWEEN 1% (100-YEAR) FLOOD AND			FLOOD HAZARD FACTOR	ZONE	BASE FLOOD ELEVATION (FEET NGVD)[3]
		10% (10-YEAR)	2% (50-YEAR)	0.2% (500-YEAR)			
Hams Fork Reach 1	1081, 1083	-0.8	-0.2	0.4	010	A2	Varies - See Map

[1]Flood Insurance Rate Map Panel [2]Weighted Average [3]Rounded to Nearest Foot

TABLE 3

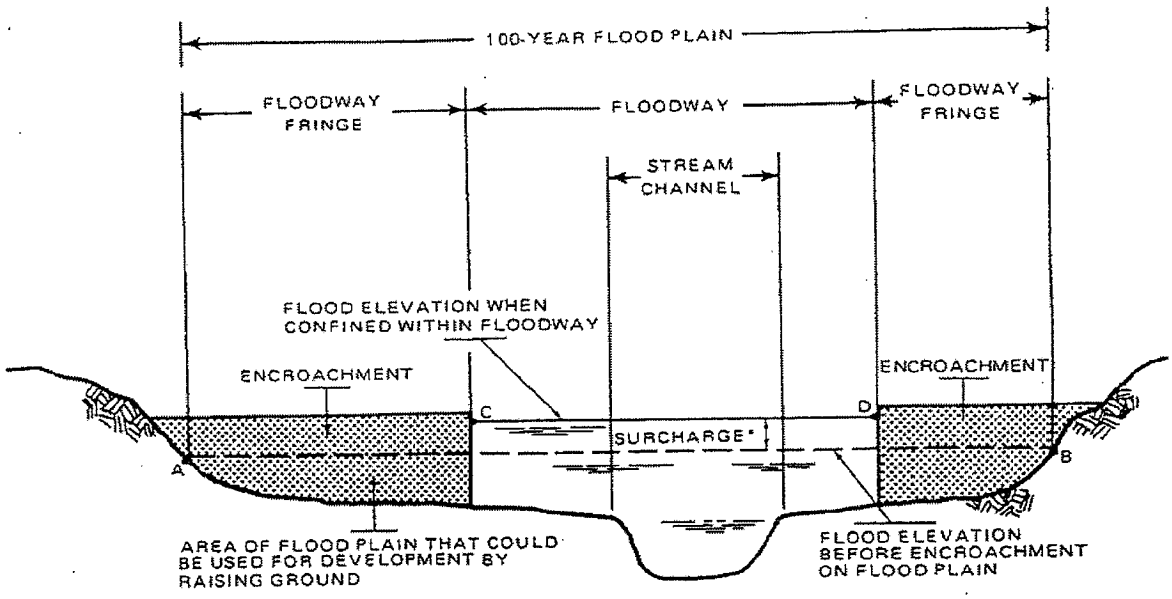
FEDERAL EMERGENCY MANAGEMENT AGENCY

LINCOLN COUNTY, WY

(UNINCORPORATED AREAS)

FLOOD INSURANCE ZONE DATA

HAMS FORK



LINE AB IS THE FLOOD ELEVATION BEFORE ENCROACHMENT.
LINE CD IS THE FLOOD ELEVATION AFTER ENCROACHMENT.
*SURCHARGE IS NOT TO EXCEED 1.0 FOOT (FIA REQUIREMENT) OR LESSER AMOUNT IF SPECIFIED BY STATE.

Figure 2. Floodway Schematic

5.0 INSURANCE APPLICATION

In order to establish actuarial insurance rates, the Federal Insurance Administration has developed a process to transform the data from the engineering study into flood insurance criteria. This process includes the determination of reaches, Flood Hazard Factors, and flood insurance zone designations for each flooding source studied in detail affecting the unincorporated areas of Lincoln County.

5.1 Reach Determinations

Reaches are defined as lengths of watercourses having relatively the same flood hazard, based on the average weighted difference in water-surface elevations between the 10- and 100-year floods. This difference does not have a variation greater than that indicated in the following table for more than 20 percent of the reach:

Average Difference Between 10- and 100-year Floods	Variation
Less than 2 feet	0.5 foot
2 to 7 feet	1.0 foot
7.1 to 12 feet	2.0 feet
More than 12 feet	3.0 feet

The location of the reaches determined for the flooding sources of Lincoln County are shown on the Flood Profiles (Exhibit 1) and summarized in Table 3.

5.2 Flood Hazard Factors

The Flood Hazard Factor (FHF) is the Federal Insurance Administration device used to correlate flood information with insurance rate tables. Correlations between property damage from floods and their FHF are used to set actuarial insurance premium rate tables based on FHFs from 005 to 200.

The FHF for a reach is the average weighted difference between the 10- and 100-year flood water-surface elevations expressed to the nearest one-half foot, and shown as a three-digit code. For example, if the difference between water-surface elevations of the 10- and 100-year floods is 0.7 foot, the FHF is 005; if the difference is 1.4 feet, the FHF is 015; if the difference is 5.0 feet, the FHF is 050. When the difference between the 10- and 100-year water-surface elevations is greater than 10.0 feet, accuracy for the FHF is to the nearest foot.

5.3 Flood Insurance Zones

After the determination of reaches and their respective Flood Hazard Factors, the unincorporated areas of Lincoln County were divided into zones, each having a specific flood potential or hazard. Each zone was assigned one of the following flood insurance zone designations:

Zone A: Special Flood Hazard Areas inundated by the 100-year flood, determined by approximate methods; no base flood elevations shown or Flood Hazard Factors determined.

Zone A2: Special Flood Hazard Areas inundated by the 100-year flood, determined by detailed methods; base flood elevations shown, and zones subdivided according to Flood Hazard Factors.

FLOODING SOURCE		FLOODWAY			BASE FLOOD WATER SURFACE ELEVATION [1]			
CROSS SECTION	DISTANCE [2]	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
					(FEET NGVD)			
Hams Fork								
AA	42.89	121	608	6.0	6899.7	6899.7	6900.7	1.0
AB	43.09	80	504	7.2	6904.4	6904.4	6905.1	0.7
AC	43.34	358	1723	2.1	6906.3	6906.3	6907.3	1.0
AD	43.64	65	307	11.9	6908.1	6908.1	6908.1	0.0
AE	43.70	61	355	10.3	6910.9	6910.9	6910.9	0.0
AF	43.82	1150	3543	1.0	6912.0	6912.0	6912.9	0.9
AG	44.24	1121 [3]	2030	1.8	6914.9	6914.9	6914.9	0.0
AH	44.39	124 [3]	601	6.1	6916.2	6916.2	6916.2	0.0
AI	44.50	140	1118	3.3	6919.3	6919.3	6919.3	0.0
AJ	44.55.	151	725	5.0	6919.9	6919.9	6920.6	0.7
AK	44.69	164	832	4.4	6920.9	6920.9	6921.4	0.5
AL	44.90	116	728	5.0	6921.8	6921.8	6922.4	0.6

[1] Water-Surface Elevations Without Considering Ice-Jam Effects [2] Miles Above Mouth [3] Width Does Not Include Island.

TABLE 2

FEDERAL EMERGENCY MANAGEMENT AGENCY

LINCOLN COUNTY, WY

(UNINCORPORATED AREAS)

FLOODWAY DATA

HAMS FORK

Zone B:	Areas between the Special Flood Hazard Areas and the limits of the 500-year flood, including areas of the 500-year flood plain that are protected from the 100-year flood by dike, levee, or other water control structure; also areas subject to certain types of 100-year shallow flooding where depths are less than 1.0 foot; and areas subject to 100-year flooding from sources with drainage areas less than 1 square mile. Zone B is not subdivided.
Zone C:	Areas of minimal flooding.
Zone D:	Areas of undetermined, but possible flood hazard.

The flood elevation differences, Flood Hazard Factors, flood insurance zones, and base flood elevations for each flooding source studied in detail in the county are summarized in Table 3.

5.4 Flood Insurance Rate Map Description

The Flood Insurance Rate Map for the unincorporated areas of Lincoln County is, for insurance purposes, the principal result of the Flood Insurance Study. This map (published separately) contains the official delineation of flood insurance zones and base flood elevation lines. Base flood elevation lines show the locations of the expected whole-foot water-surface elevations of the base (100-year) flood. This map is developed in accordance with the latest flood insurance map preparation guidelines published by the Federal Insurance Administration.

6.0 OTHER STUDIES

The Federal Insurance Administration published Flood Insurance Studies for the Towns of Diamondville and Kemmerer, and Uinta County, Wyoming (References 9, 10, and 11, respectively). Those studies are in general agreement with this study.

The Federal Insurance Administration Flood Hazard Boundary Map (Reference 8) was used directly for approximate areas in portions of this study.

This study is authoritative for the purposes of the National Flood Insurance Program; data presented herein either supersede or are compatible with all previous determinations.

7.0 LOCATION OF DATA

Information concerning the pertinent data used in the preparation of this study can be obtained by contacting the Federal Emergency Management Agency, Mitigation Division, Denver Federal Center, Building 710, Box 25267, Denver, Colorado 80225-0267.

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9.0 REVISION DESCRIPTIONS

This section has been added to provide information regarding significant revisions made since the original Flood Insurance Study was printed. Future revisions may be made that do not result in the republishing of the Flood Insurance Study report. To assure that any user is aware of all revisions, it is advisable to contact the community repository of flood-hazard data located at the Lincoln County Planning Office, Beech Street and Topaz Avenue, Kemmerer, Wyoming 83101.

9.1 First Revision

This study was revised on September 21, 1998, to update flood plain information for Smiths and South Forks and Spring Creek in Lincoln County, Wyoming, to include more detailed hydrologic and hydraulic information and to reflect updated county limits.

The hydrologic and hydraulic analyses for this restudy were performed by Foothill Engineering Consultants, Inc., the study contractor, for the Federal Emergency Management Agency (FEMA), under Contract No. EMW-93-C-4150. This restudy was completed in January 1996.

The streams were identified in an initial Consultation Coordination Officer (CCO) meeting held on April 4, 1994. The meeting was attended by representatives of FEMA, the U.S. Geological Survey (USGS), the Town of Cokeville, and the study contractor.

The Smiths Fork tri-diversion structure divides flood flows from Smiths Fork proportionately among three channels: Smiths and South Forks and Spring Creek. When flood levels threaten structures within the Town of Cokeville corporate limits, all additional flood water is diverted down the Smiths Fork River channel. The Smiths Fork tri-diversion structure is located approximately 1,200 feet northeast of the northern border of the Town of Cokeville corporate limits along Smiths Fork within the unincorporated areas of Lincoln County.

The Smiths Fork study reach (2.4 miles) is entirely within Lincoln County and only a small portion of the South Fork study reach (1.7 miles) is within the Town of Cokeville. Most of the Spring Creek study reach (1.7 miles) is within the Town of Cokeville. Because of historical flooding, floods caused by the overflow of Smiths and South Forks and Spring Creek were restudied using more detailed information than that used for the previous Flood Insurance Rate Map for the unincorporated areas of Lincoln County, Wyoming (Reference 12). These areas were selected with consideration given to all proposed construction and forecasted development through December 1996.

At present, levees exist on Smiths Fork between the Union Pacific Railroad and Highway 30. The levee along the north bank was constructed in 1982 by the Wyoming Emergency Civil Defense Department. The levee along the south bank was constructed in 1986 with U.S. Army Corps of Engineers (USACE) funding as part of a flood fight. While both the north- and south-bank levees were intended to be temporary structures, the south-bank levee was improved and upgraded in 1995 according to the Natural Resources Conservation Service (NRCS) (formerly the Soil Conservation Service) and the Cokeville Watershed Improvement District (CWID). These levees will not contain the 100-year flood.

Lincoln County has experienced primarily shallow flooding from Smiths Fork on a number of occasions. Flooding occurred in high-snowpack years during the 1960s and 1970s. There were 10 years during those two decades where the peak discharge exceeded 1,000 cfs, with 1971 having the highest discharge of 1,610 cfs. However, the high-runoff years of 1982, 1983, 1984, and 1986 resulted in discharges ranging from 1,490 to 2,100 cfs. The flooding during those years was partially mitigated by the completion of emergency flood-control measures with assistance from the USACE. Those measures included clearing and snagging of vegetation within the Smiths Fork channel and construction of temporary emergency levees at locations along Smiths Fork as previously described. The reported flooding usually consisted of slight inundation of fields within the unincorporated areas of Lincoln County, but approximately 20 residential structures on the west end of the Town of Cokeville were affected by shallow

flooding or elevated water table levels in 1983. Base flood flows in Spring Creek, which are controlled at the Smiths Fork tri-diversion structure, are contained within the channel.

Cross-section data for Smiths and South Forks and Spring Creek were obtained from several sources. These included field surveys in 1983 by the NRCS and 1994 by a private surveying contractor, 1981 aerial contour mapping (Reference 13), and USGS 7.5-minute series topographic mapping (Reference 14). Structural geometry for bridges and culverts was also obtained during the field-survey effort.

For Smiths and South Forks and Spring Creek, the flood plain boundaries were delineated using USGS topographic mapping at a scale of 1:24,000, with a contour interval of 20 feet (Reference 14).

Shallow flooding limits (Zone X, shaded) adjacent to South Fork northwest of the Town of Cokeville are a result of overflow from Smiths Fork. These shallow flooding limits have been delineated by NRCS personnel and are based on historical flooding that occurred during the high-runoff years of 1983 and 1984. This delineation is supported by Town personnel based on their judgment, personal knowledge, and interviews with landowners in that area.

The Smiths Fork basin consists of scrubby sagebrush, pasture, and limited trees. The Smiths Fork drainage basin is a high mountain tributary of the Bear River, located on the western border of Wyoming. Smiths Fork drains an area of approximately 275 square miles just upstream of the tri-diversion structure and elevations in the basin range from 6,200 to over 10,300 feet at the upper basin limits. Land use in the watershed is approximately 77 percent rangeland, 14 percent forestland, and the remainder irrigated and dry-land farming. Average annual precipitation in the lower elevations of the basin is approximately 13 inches. The majority of precipitation falls as snow. On average, 70 inches can be expected to accumulate as snow in the higher elevations. The characteristics of the sedimentary geologic environment in the upper part of the watershed can be classified generally as siltstone, limestone, and sandstone. The soils in the basin can be classified generally as inorganic, gravelly, sandy, and clean clays. The soils support herbaceous ground cover with shallow root systems and a variety of indigenous grasses.

The hydrologic analysis for Smiths Fork consisted of obtaining annual peak streamflow records for Smiths Fork at the Border, Wyoming, gage and performing a frequency analysis fitting a log-Pearson Type III distribution in accordance with guidelines found in Interagency Advisory Committee on Water Data Bulletin No. 17B, "Guidelines for Determining Flood Flow Frequency" (Reference 15). The analysis was completed using the USACE HEC-FFA computer program (Reference 16).

For Smiths Fork, annual peak streamflow records were obtained for both the Border gage (Gage No. 10032000, drainage area = 165 square miles) for the years 1942 through 1992, and the Cokeville gage (Gage No. 10032500, drainage area = 275 square miles) for the years 1942 through 1952. A comparison was made of the 11 years of overlapping records for the two gages and it was determined that annual peak flows at the Cokeville gage were approximately 2.4 percent higher than peak flows at the Border gage, on average,

despite the substantial difference in drainage areas. As such, the annual peak flows for the Border gage were used to perform a frequency analysis and those results were increased by 2.4 percent to represent computed peak discharges at the Cokeville gage. Based on Bulletin No. 17B, a regional map skew coefficient of -0.35 was selected and used in the analysis.

A rainfall-runoff model was developed for the Spring Creek drainage basin, where a unit hydrograph was derived for the basin in accordance with the procedure outlined in the U.S. Bureau of Reclamation publication "Flood Hydrology Manual" (Reference 17). Rainfall-depth data were obtained from National Oceanic and Atmospheric Administration NOAA Atlas 2, "Precipitation Frequency of the Western United States, Volume II - Wyoming" (Reference 18). Other hydrology modeling parameters, such as basin area and slope and channel routing geometry and slope, were obtained from USGS 7.5-minute series topographic maps (Reference 14) and field observations.

The primary source of flooding occurs downstream of the tri-diversion structure. The tri-diversion structure trifurcates the flow from the Smiths Fork drainage basin into Smiths and South Forks and Spring Creek. The tri-diversion structure is located in Lincoln County, approximately 1,200 feet northeast of the northern border of the Town of Cokeville corporate limits. To prevent flood waters from overtopping the channel banks of Spring Creek and flooding the Town of Cokeville and parts of the unincorporated areas of Lincoln County, operational guidelines to strictly administer the three-way flow were developed between the Town of Cokeville and the Cokeville Watershed Improvement District (CWID). The 100-year discharge for Smiths Fork above the tri-diversion structure is 2,160 cfs. As determined by the NRCS and the CWID, the channel banks of Spring Creek can contain a capacity of 20 percent (425 cfs) of Smiths Fork 100-year discharge before overflow occurs. Six percent (125 cfs) of Smiths Fork trifurcated flow would be diverted down South Fork and 74 percent (1,550 cfs) would remain in Smiths Fork.

However, Spring Creek has a secondary source of flooding contributing to its total flow. The total flow in Spring Creek is a combination of the trifurcated Smiths Fork flow and the uncontrolled Spring Creek drainage basin flow that intersects with the trifurcated Smiths Fork flow approximately 1,200 feet downstream of the tri-diversion structure at the Town of Cokeville corporate limits.

To determine the maximum total flow for Spring Creek, the 100-year flood event for the Spring Creek drainage basin was modeled. The 100-year peak discharge for the Spring Creek drainage basin from the 5.3-square-mile Spring Creek basin was 265 cfs. When the Spring Creek drainage basin experiences a 100-year flood event, it was estimated that Smiths Fork experiences a corresponding 10-year flood event. In accordance with the tri-diversion agreement, the 1,540-cfs discharge from the 10-year flood event on Smiths Fork would result in trifurcated flows as follows: 13 percent (200 cfs) diverted to Spring Creek, 6 percent (90 cfs) diverted to South Fork, and 81 percent (1,250 cfs) remaining in Smiths Fork. Combining the flow from the trifurcated Smiths Fork 10-year flood event that eventually intersects with Spring Creek with that of the flow from the Spring Creek drainage basin 100-year flood event results in a base discharge of 465 cfs for Spring Creek.

Water-surface elevations were computed using the USACE HEC-2 computer program (Reference 19). Water-surface profiles for South Fork and Spring Creek were determined for the 100-year flood only, and were drawn to a plotted accuracy of 0.5 foot.

Channel roughness coefficients (Manning's "n" values) used in the hydraulic computations were chosen by engineering judgment based on field observations and photographs of the flood plain areas. Channel and overbank values for Smiths and South Forks and Spring Creek are shown in Table 4, "Manning's "n" Values."

A floodway analysis was not included in the scope of work; therefore, no floodways are shown on Smiths and South Forks or Spring Creek.

Table 1, "Summary of Discharges," and Exhibit 1, "Flood Profiles," were revised and Table 4, "Manning's "n" Values," was added to reflect changes as a result of the restudy.

Table 4. Manning's "n" Values

Flooding Source	Roughness Coefficients	
	Channel	Overbanks
Smiths Fork	0.04-0.07	0.05-0.06
South Fork	0.04-0.05	0.05-0.06
Spring Creek	0.04-0.45	0.06

*U.S. GOVERNMENT PRINTING OFFICE: 1998-432-423/80105 Region 3

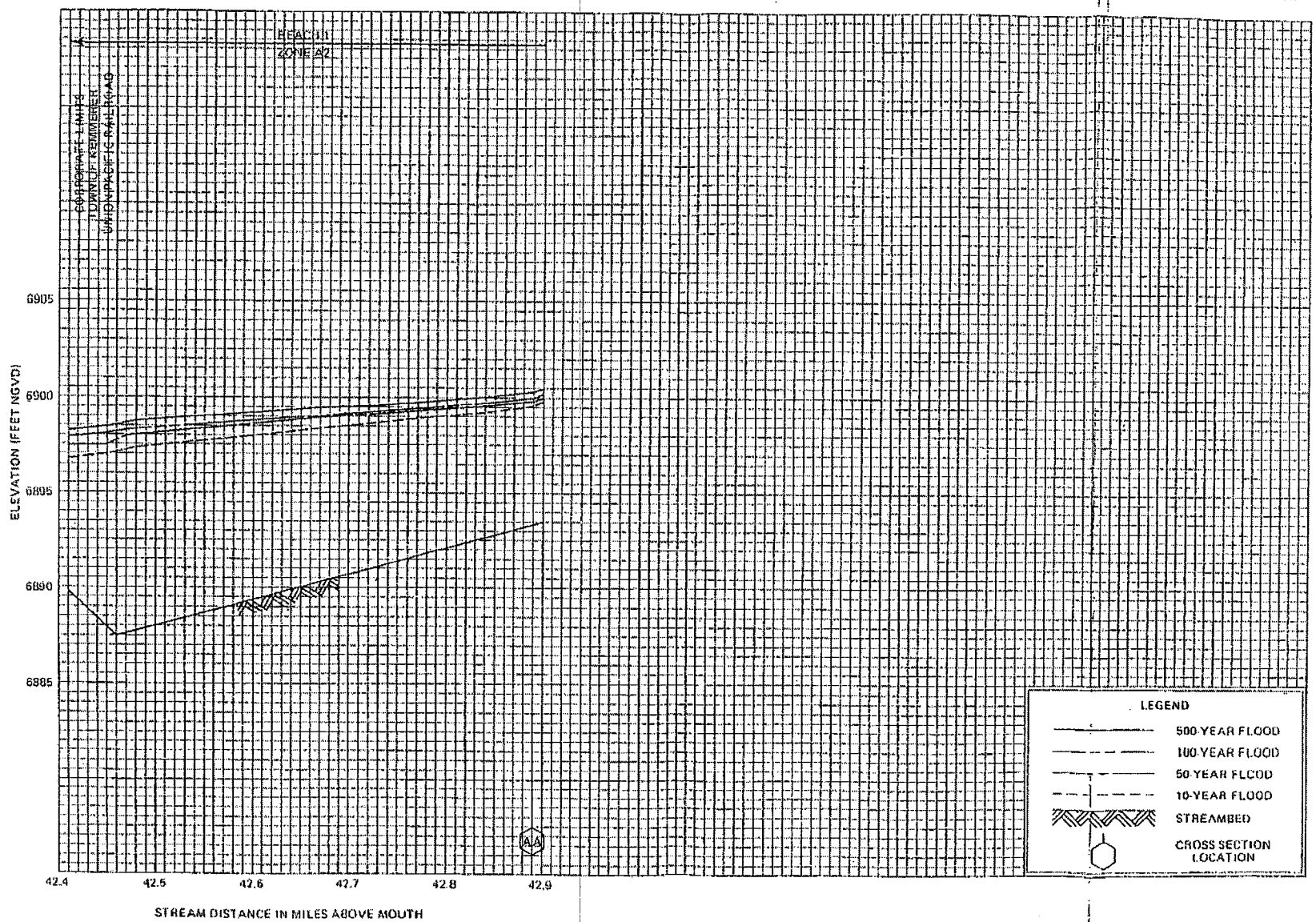
FEDERAL EMERGENCY MANAGEMENT AGENCY

LINCOLN COUNTY, WY
(UNINCORPORATED AREAS)

FLOOD PROFILES

HAMS FORK

01P



FLOOD PROFILES

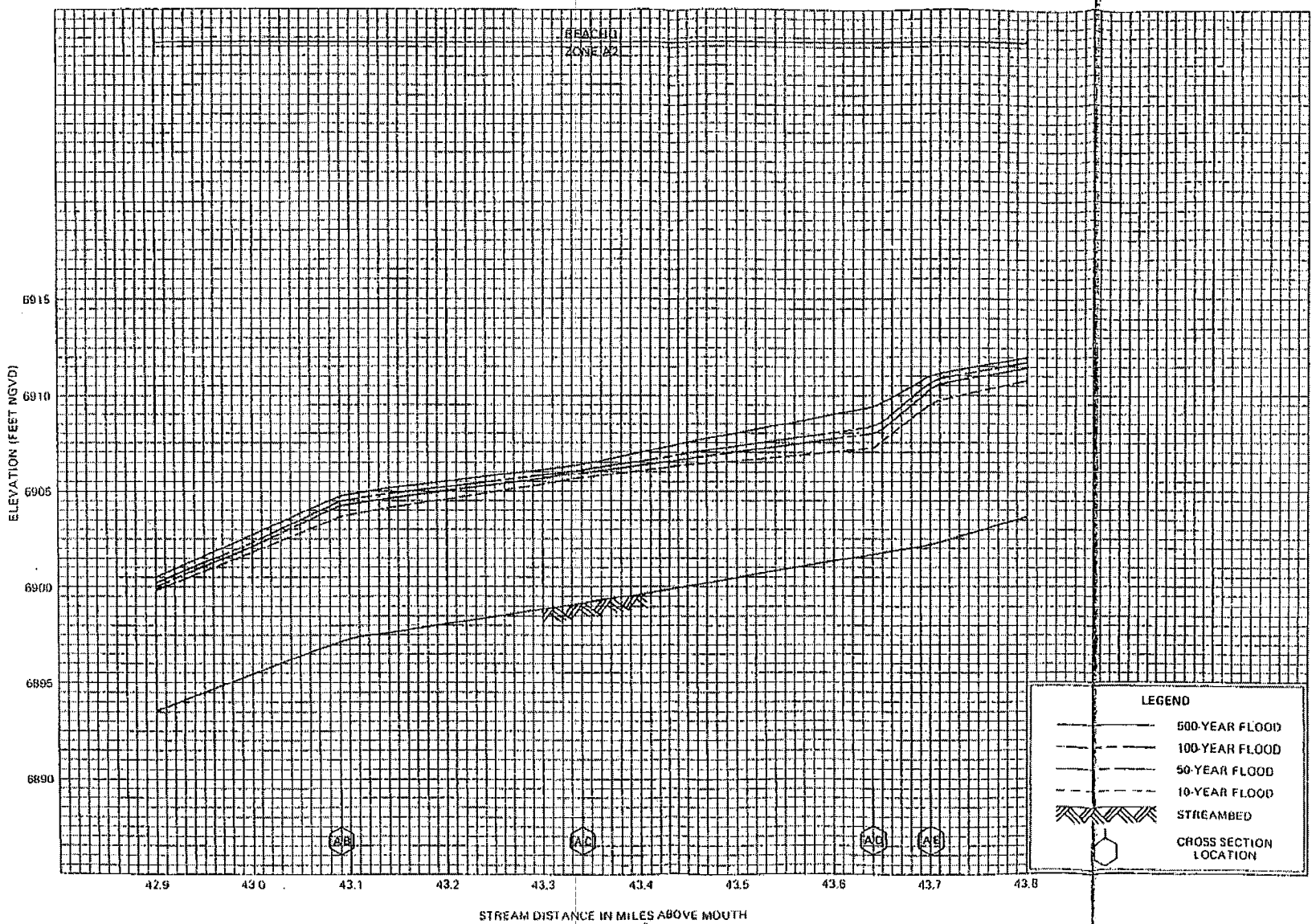
HAMS FORK

FEDERAL EMERGENCY MANAGEMENT AGENCY

LINCOLN COUNTY, WY

(UNINCORPORATED AREAS)

02P



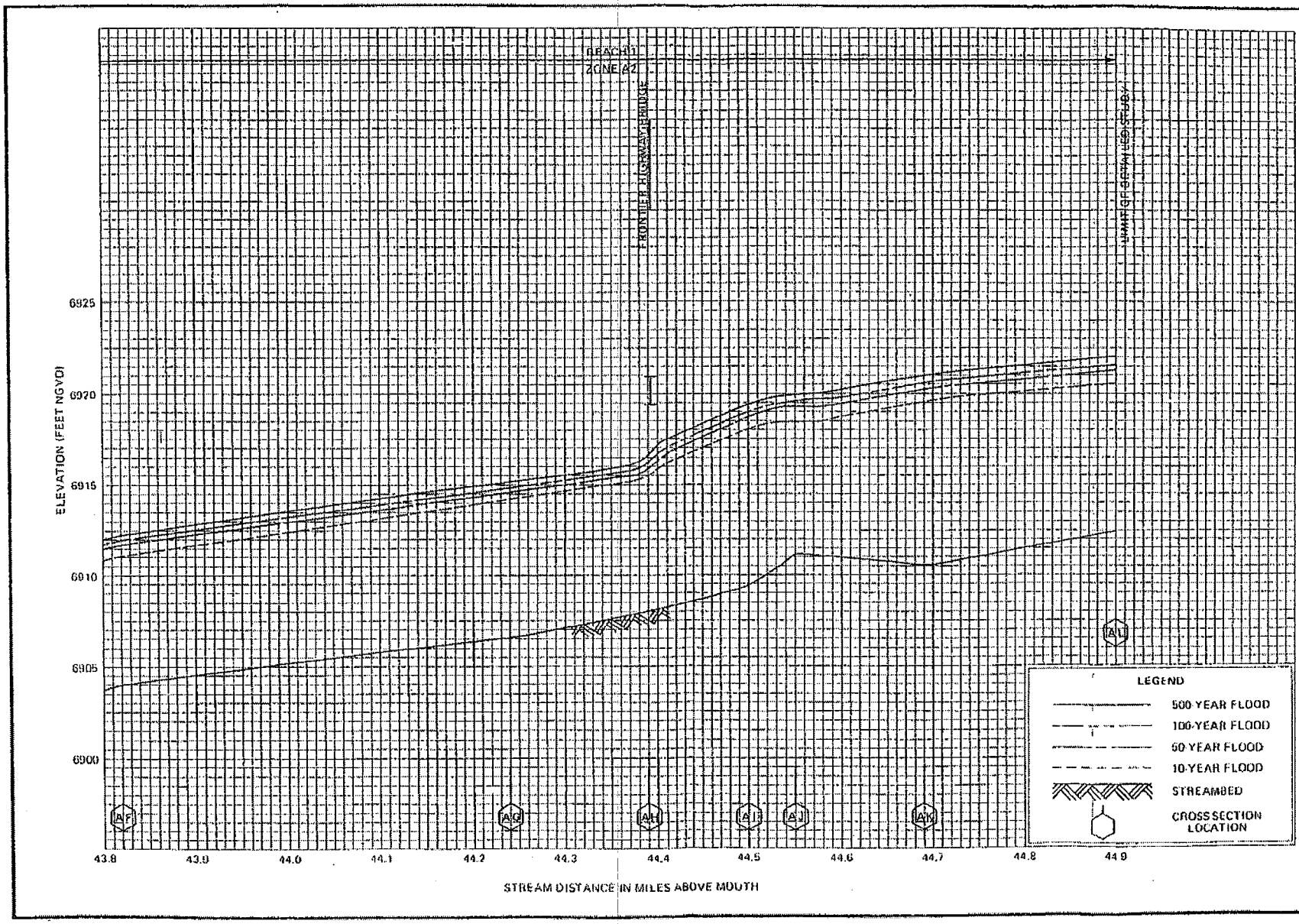
FLOOD PROFILES

HAMS FORK

FEDERAL EMERGENCY MANAGEMENT AGENCY

LINCOLN COUNTY, WY
(UNINCORPORATED AREAS)

03P



FLOOD PROFILES

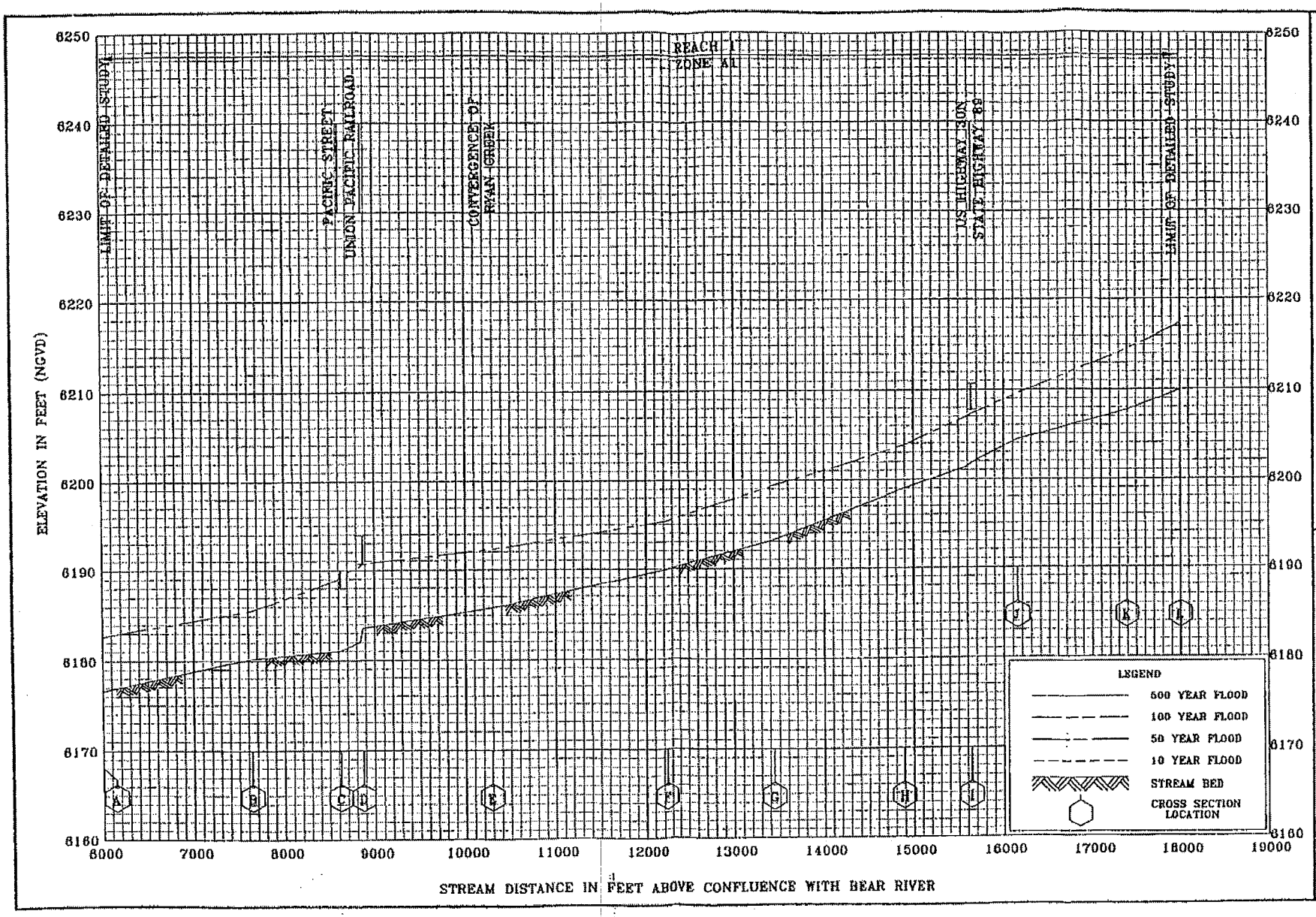
HAMS FORK

FEDERAL EMERGENCY MANAGEMENT AGENCY

LINCOLN COUNTY, WY

(UNINCORPORATED AREAS)

04P



FLOOD PROFILES

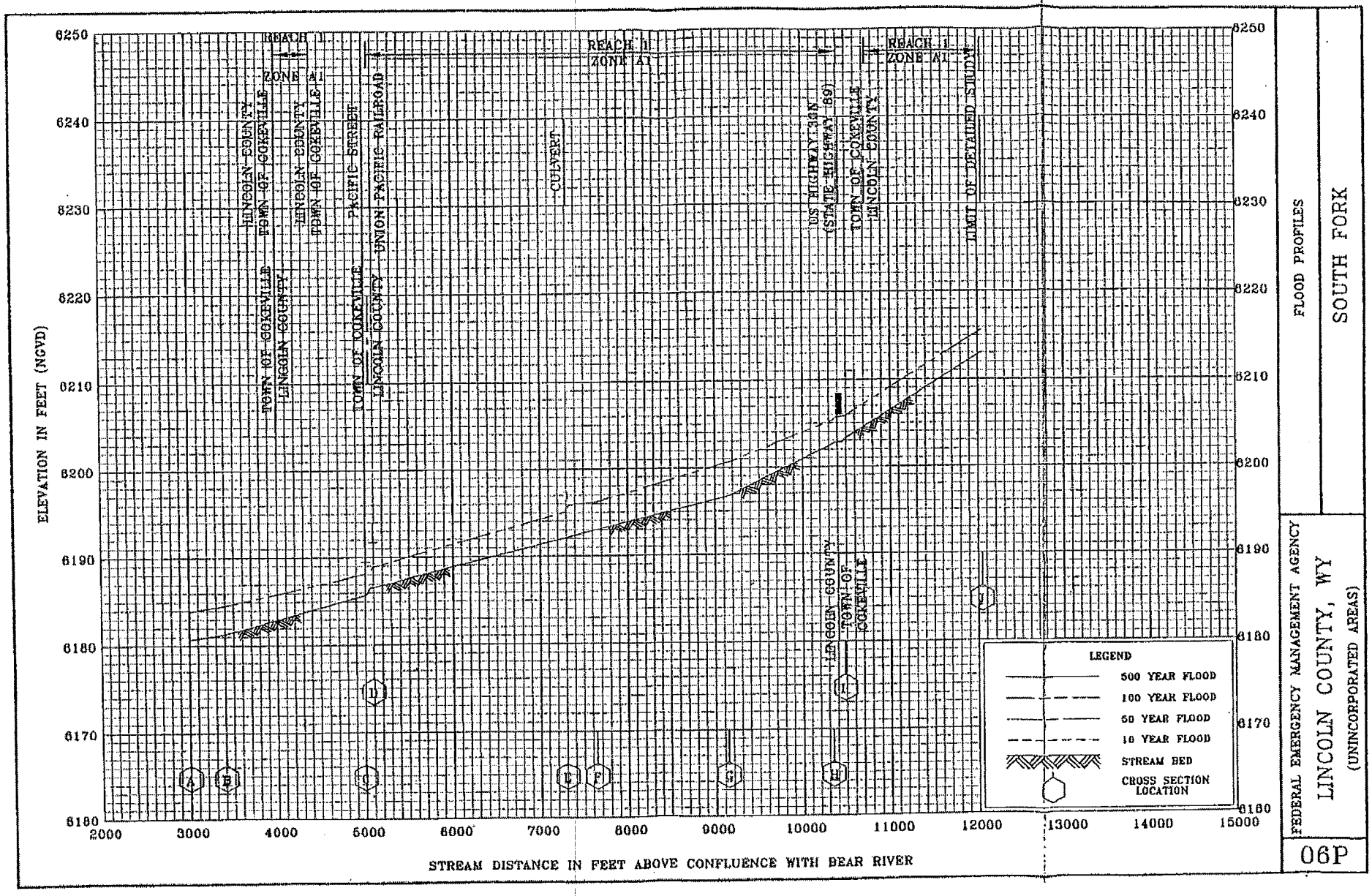
SMITHS FORK

FEDERAL EMERGENCY MANAGEMENT AGENCY

LINCOLN COUNTY, WY

(UNINCORPORATED AREAS)

05P


REACH 1
ZONE A1
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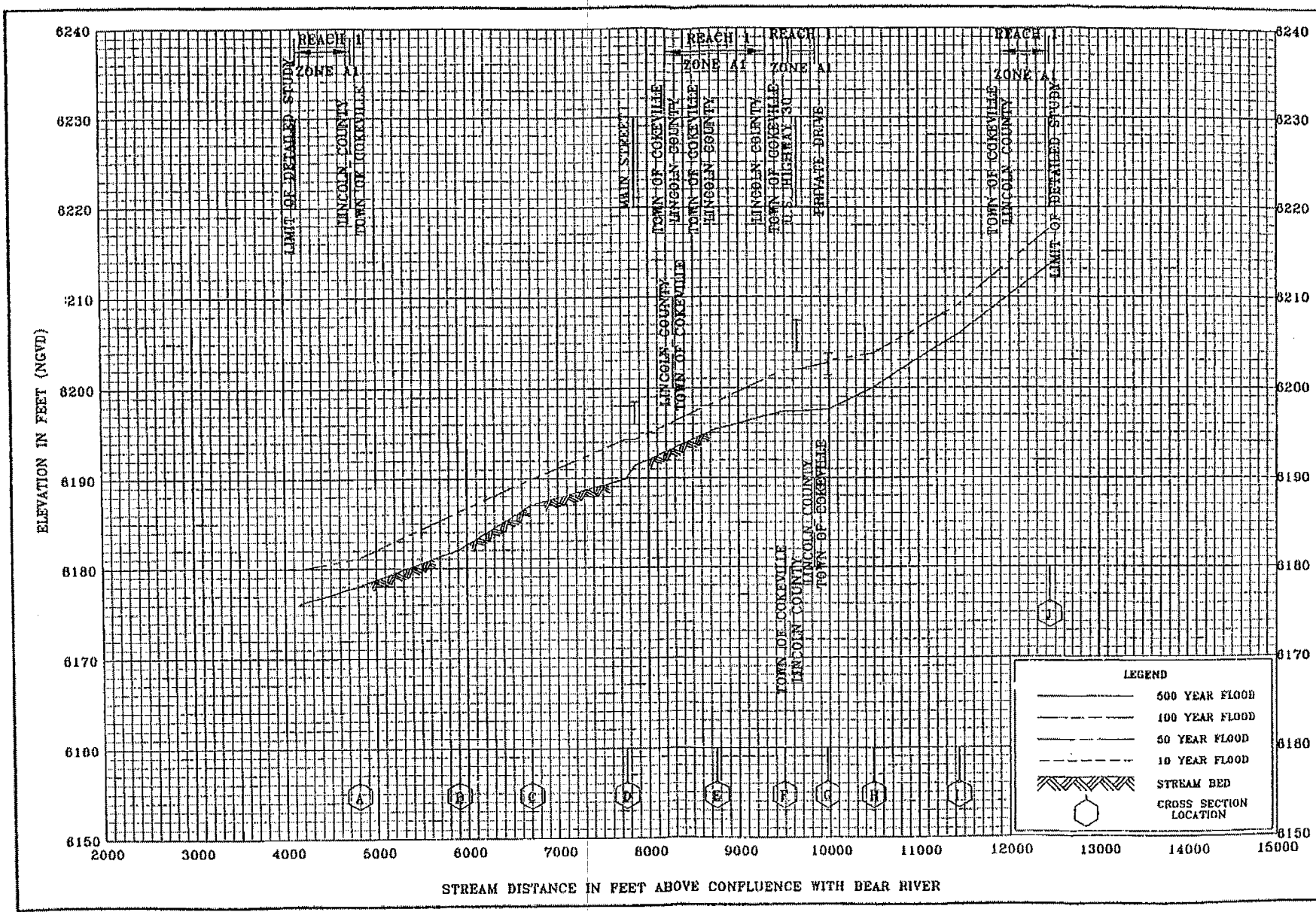
ZONE A1
LIMIT OF DETAILED STUDY
LINCOLN COUNTY
TOWN OF COKEVILLE
LINCOLN COUNTY
TOWN OF COKEVILLE
LINCOLN COUNTY
TOWN OF COKEVILLE
PACIFIC STREET
TOWN OF COKEVILLE
LINCOLN COUNTY
UNION PACIFIC RAILROAD
CULVERT
US HIGHWAY 30N
(STATE HIGHWAY 89)
TOWN OF COKEVILLE
LINCOLN COUNTY
LINCOLN COUNTY
TOWN OF COKEVILLE
ELEVATION IN FEET (NGVD)
6250
6240
6230
6220
6210
6200
6190
6180
6170
6160
2000
3000
4000
5000
6000
7000
8000
9000
10000
11000
12000
13000
14000
15000
STREAM DISTANCE IN FEET ABOVE CONFLUENCE WITH BEAR RIVER
LEGEND
500 YEAR FLOOD
100 YEAR FLOOD
50 YEAR FLOOD
10 YEAR FLOOD
STREAM BED
CROSS SECTION LOCATION
FLOOD PROFILES
SOUTH FORK
FEDERAL EMERGENCY MANAGEMENT AGENCY
LINCOLN COUNTY, WY
(UNINCORPORATED AREAS)
06P



FLOOD PROFILES

SPRING CREEK

FEDERAL EMERGENCY MANAGEMENT AGENCY

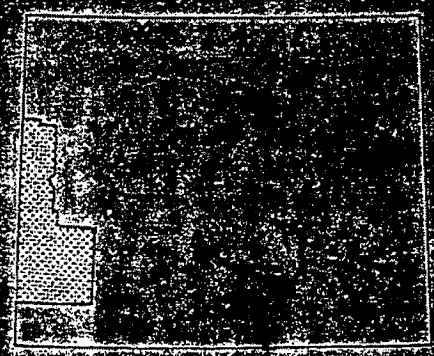
LINCOLN COUNTY, WY

(UNINCORPORATED AREAS)

07P

FLOOD INSURANCE STUDY

LINCOLN COUNTY, WYOMING
UNINCORPORATED AREAS



REVISED: JUNE 17, 2003

Federal Emergency Management Agency

FLOOD INSURANCE STUDY NUMBER
56019CV000A

NOTICE TO
FLOOD INSURANCE STUDY USERS

Communities participating in the National Flood Insurance Program have established repositories of flood hazard data for flood plain management and flood insurance purposes. This Flood Insurance Study may not contain all data available within the repository. It is advisable to contact the community repository for any additional data.

This publication incorporates revisions to the original Flood Insurance Study. These revisions are presented in Section 9.0.

Part or all of this Flood Insurance Study may be revised and republished at any time. In addition, part of this Flood Insurance Study may be revised by the Letter of Map Revision process, which does not involve republication or redistribution of the Flood Insurance Study. It is, therefore, the responsibility of the user to consult with community officials and to check the community repository to obtain the most current Flood Insurance Study components.

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PUBLISHED SEPARATELY

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Flood Insurance Rate Map

FLOOD INSURANCE STUDY

1.0 INTRODUCTION

1.1 Purpose of Study

The purpose of this Flood Insurance Study is to investigate the existence and severity of flood hazards in the unincorporated areas of Lincoln County, Wyoming, and to aid in the administration of the National Flood Insurance Act of 1968 and the Flood Disaster Protection Act of 1973. Initial use of this information will be to convert Lincoln County to the regular program of flood insurance by the Federal Insurance Administration. Further use of the information will be made by local and regional planners in their efforts to promote sound land use and flood plain development.

1.2 Coordination

Streams requiring detailed studies were identified in a meeting attended by county planners and representatives of the Federal Insurance Administration and the study contractor on April 23, 1976. A second coordination meeting was held with county planners on September 20, 1976, when objectives of the study were discussed.

Federal agencies contacted during the study included the U.S. Geological Survey; the U.S. Soil Conservation Service; the U.S. Army Corps of Engineers; and the National Oceanic Atmospheric Administration, National Weather Service. Coordination with the State of Wyoming included the State Engineer and the Director of Civil Defense.

A final coordination meeting was held on July 6, 1977, in the Lincoln County courthouse. This was a combined meeting with the incorporated Towns of Diamondville and Kemmerer, as well as unincorporated Lincoln County. Attending the meeting were representatives of the Towns of Diamondville and Kemmerer, Lincoln County, the Federal Insurance Administration, and the study contractor. No objections to this study were raised as a result of the meeting.

1.3 Authority and Acknowledgments

The source of authority for this Flood Insurance Study is the National Flood Insurance Act of 1968, as amended.

The hydrologic and hydraulic analyses for this study were performed by Nelson, Haley, Patterson, and Quirk, Inc., for the Federal Insurance Administration, under Contract No. H-3993. This work, which was completed in May 1977, covered all significant flooding sources affecting the unincorporated areas of Lincoln County, Wyoming.

2.0 AREA STUDIED

2.1 Scope of Study

This Flood Insurance Study covers the unincorporated areas of Lincoln County, Wyoming. The area of study is shown on the Vicinity Map (Figure 1). Not included in this study are the incorporated Towns of Afton, Cokeville, Kemmerer, Thayne, Diamondville, and Opal, Wyoming.

Floods caused by the overflow of Hams Fork from the north line of Section 12, Township 21 North, Range 116 west of the 6th principal meridian to the northern corporate limits of Kemmerer were studied in detail because of historical flooding and potential flood hazard.

Approximate study methods were used for the following streams and their major tributaries for limited portions or the entire length within the study area; Bear River, Blacks Fork, Bridger Creek, Green River, Hams Fork, Labarge Creek, Salt River, Sevenmile Wash, Shake River, Twin Creek, and Willow Creek. These streams were studied in this manner due to the lack of development in their flood plains.

The scope and methods of study were proposed to and agreed upon by representatives of the Federal Insurance Administration and Lincoln County, Wyoming.

Those areas studied by detailed methods were chosen with consideration given to all proposed construction and forecasted development through 1982.

2.2 Community Description

Lincoln County is located in southwest Wyoming and is bordered on the north by Teton and Sublette Counties; on the east by Sweetwater County; on the south by Uinta County, and on the west by Rich County, Utah, and Bear Lake, Caribou, and Bonneville Counties, Idaho.

The area studied in detail is occupied, for the most part, by the Town of Frontier. The Town of Frontier is situated on the floor of a valley and is 1 mile north of Kemmerer, 50 miles northeast of Evanston, 71 miles northwest of Green River, and in south-central Lincoln County.

The Town of Frontier was originally established as a coal mining community. Rich coal veins were discovered in 1868, but the Frontier Mine was not opened until 1897. This mine became one of the best-paying coal mines in the area. The coal boom lasted approximately 40 years before its eventual decline. Renewed interest in coal as an energy source has stimulated the economy of the area.

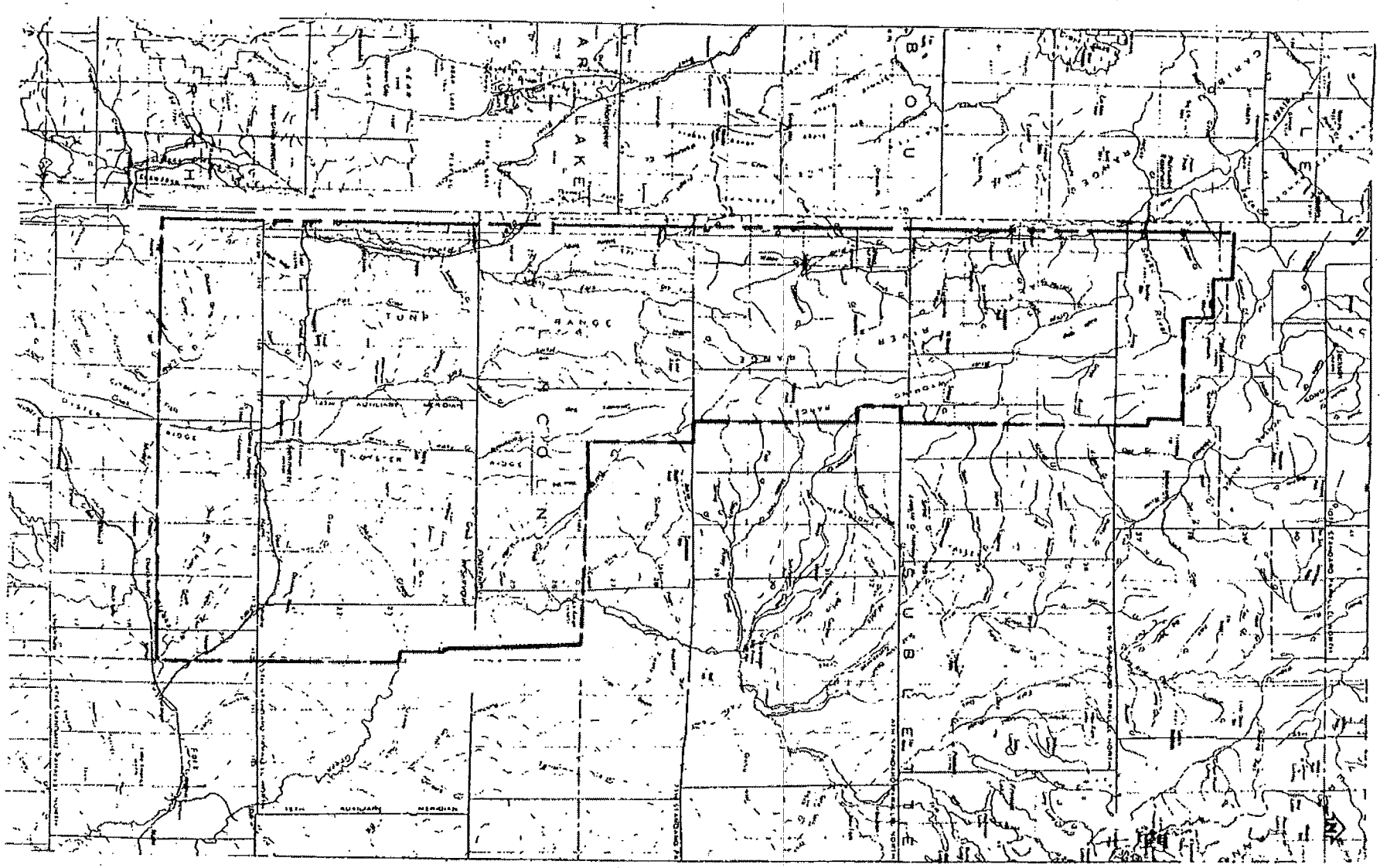

FIGURE 1

FEDERAL EMERGENCY MANAGEMENT AGENCY

LINCOLN COUNTY, WY

(UNINCORPORATED AREAS)

APPROXIMATE SCALE

16 0 16 32 48 MILES

VICINITY MAP

Frontier remains a mining community. It has changed from a self-sufficient community to a suburb of Kemmerer, a nearby ranching community. The population of Frontier declined from 700 (1950 census) to 300 (1970 census).

Hams Fork flows from northwest of Frontier. Willow Creek joins Hams Fork approximately 3 miles north of Kemmerer. Hams Fork flows south through Frontier, Kemmerer, Diamondville, and eventually to its confluence with Green River.

The relief pattern of the State of Wyoming is one of deeply eroded mountain ranges separated by large basinlike depressions. The drainage basin of Hams Fork is a miniature of this pattern. The hills and ridges that define this basin were formed from the upheaval of sedimentary formations which have been eroded over the eons. The topsoil of these hills is light brown.

Frontier is situated at an altitude of 6954 feet, and is located in a flat-bottom river valley. The town is surrounded by low hills, which afford some protection from harsher weather. Because of its altitude, the town is somewhat cooler throughout the year. The maximum temperatures range from 81.2°F in July to 6.8°F in January. Average yearly precipitation is approximately 8.6 inches.

Ground cover in the hills surrounding Frontier is sparse and typical of an arid climate: sagebrush, a variety of cactus, mesquite, and gramma grass. A variety of large trees exists in Frontier, with cottonwood trees being the dominant type. Moving closer to Hams Fork, the vegetation becomes more dense and generally taller.

2.3 Principal Flood Problems

Damage resulting from flooding is minor, with a small amount of property loss. Floods occurring in 1950 and 1971 were due to heavy winter snows followed by an extremely mild spring. In 1950, the dam at Kemmerer Reservoir took the brunt of the floodwaters. Meadows along Hams Fork were flooded, but no serious damage to houses or roads was reported. The dam at Kemmerer Reservoir was reinforced to ensure its safety. Temporary dikes were built to protect the lower areas of Frontier. The 2450 cubic feet per second (cfs) of discharge of the 1950 flood, measured at Hams Fork, was representative of a 25-year frequency flood (Reference 1).

In 1971, an unusual amount of snow followed by a warm spring was again the cause for concern over high water. Fields on ranches in the valley were under water, but no damages were reported to residences. The Air National Guard flew in 1000 sandbags for volunteers to build temporary dikes to curb the high waters. Equipment and operators were volunteered by several construction companies in the area. The 1971 flood had a discharge of 2120 cfs and was representative of a 10-year flood.

2.4 Flood Protection Measures

A permanent flood protection measure is in the form of a minor levee system along Hams Fork. Temporary protection is afforded by volunteers building temporary dikes and sandbagging.

3.0 ENGINEERING METHODS

For the flooding sources studied in detail in the county, standard hydrologic and hydraulic study methods were used to determine the flood hazard data required for this study. Flood events of a magnitude which are expected to be equalled or exceeded once on the average during any 10-, 50-, 100-, or 500-year period (recurrence interval) have been selected as having special significance for flood plain management and for flood insurance premium rates. These events, commonly termed the 10-, 50-, 100-, and 500-year floods, have a 10, 2, 1, and 0.2 percent chance, respectively, of being equalled or exceeded during any year. Although the recurrence interval represents the long term average period between floods of a specific magnitude, rare floods could occur at short intervals or even within the same year. The risk of experiencing a rare flood increases when periods greater than 1 year are considered. For example, the risk of having a flood which equals or exceeds the 100-year flood (1 percent chance of annual occurrence) in any 50-year period is approximately 40 percent (4 in 10), and, for any 90-year period, the risk increases to approximately 60 percent (6 in 10). The analyses reported here reflect flooding potentials based on conditions existing in the county at the time of completion of this study. Maps and flood elevations will be amended periodically to reflect future changes.

3.1 Hydrologic Analyses

Hydrologic analyses were carried out to establish the peak discharge-frequency relationships for floods of the selected recurrence intervals for each stream studied in detail in the county.

For Hams Fork, floodflow-frequency data were based on statistical analyses of discharge records at several gaging stations in the Lincoln County area operated by the U.S. Geological Survey (References 1, 2, 3, and 4). Locations and lengths of records for these gages are

1. 2.0 miles downstream from Pole Creek, 4.6 miles upstream from Taylor Creek, and 22 miles northwest of Frontier; period of record from October 1952 to present

2. 800 feet upstream from U.S. Highway 189 bridge, 1.5 miles upstream from Willow Creek, and 3.5 miles northwest of Frontier; period of record from May 1945 to present

3. At U.S. Highway 189 bridge at Diamondville, 4 miles downstream from Willow Creek; period of record from October 1926 to 1949

The analyses followed the standard log-Pearson Type III method as outlined by the U.S. Water Resources Council (Reference 5). To obtain peak discharges for the specified recurrence intervals, a simple regression analysis was used regressing peak discharges onto drainage basin size measured in square miles.

There are several small lakes and reservoirs that have little flood regulation capacity. These reservoirs may attenuate peak discharges immediately downstream, but will have little effect in the detailed study area.

Peak discharge-drainage area relationships for Hams, Smith, and South Forks and Spring Creek are shown in Table 1, "Summary of Discharges."

3.2 Hydraulic Analyses

Analyses of the hydraulic characteristics of streams in the county were carried out to provide estimates of the elevations of floods of the selected recurrence intervals along each stream studied in the county.

Water-surface elevations were developed using the U.S. Army Corps of Engineers HEC-2 computer program (Reference 6). Profiles were determined for the 10-, 50-, 100-, and 500-year floods.

Cross-section data for the area were obtained by field-survey methods, and all bridges were surveyed to obtain elevation data and structural geometry.

Locations of selected cross sections used in the hydraulic analyses are shown on the Flood Profiles (Exhibit 1). For stream segments for which a floodway is computed (Section 4.2), selected cross-section locations are also shown on the Flood Boundary and Floodway Map (Exhibit 2).

Table 1. Summary of Discharges

Flooding Source and Location	Drainage Area (Square Miles)	Peak Discharges (Cubic Feet per Second) 10-Year	50-Year	100-Year	500-Year
Hams Fork					
Frontier Area	379	2,709	3,434	3,708	4,276
Salt River					
At Palisades Reservoir	829	--[1]	--[1]	6,120	--[1]
Upstream of Jackknife Creek	759	--[1]	--[1]	5,720	--[1]
Upstream of Tincup Creek	666	--[1]	--[1]	5,170	--[1]
Smiths Fork					
Town of Cokeville Area	275	--[1]	--[1]	1,610	--[1]
South Fork					
Town of Cokeville Area	275	--[1]	--[1]	125	--[1]
Spring Creek					
Town of Cokeville Area	280	--[1]	--[1]	465	--[1]
Strawberry Creek					
At confluence with Salt River	532	--[1]	--[1]	4,350	--[1]
Willow Creek					
At confluence with Salt River	497	--[1]	--[1]	4,120	--[1]

[1]Not computed

Roughness coefficients (Manning's "n") were estimated by field inspection and photographs at each cross section. Roughness values for the main channel ranged from 0.029 to 0.044, depending on channel condition and obstructions; roughness values for the flood plain ranged from 0.028 to 0.138, depending on vegetation, irregularity, obstructions, and meandering.

Starting water-surface elevations were calculated using normal depth analysis.

Flood profiles were drawn showing computed water-surface elevations to an accuracy of 0.5 foot for floods of the selected recurrence intervals (Exhibit 1).

All elevations are referenced to the National Geodetic Vertical Datum of 1929 (NGVD). Elevation reference marks used in the study are shown on the maps.

4.0 FLOOD PLAIN MANAGEMENT APPLICATIONS

A prime purpose of the National Flood Insurance Program is to encourage State and local governments to adopt sound flood plain management programs. Each Flood Insurance Study, therefore, includes a flood boundary map designed to assist communities in developing sound flood plain management measures.

4.1 Flood Boundaries

In order to provide a national standard without regional discrimination, the 100-year flood has been adopted by the Federal Insurance Administration as the base flood for purposes of flood plain management measures. The 500-year flood is employed to indicate additional areas of flood risk in the county. For each stream studied in detail, the boundaries of the 100- and 500-year floods have been delineated using the flood elevations determined at each cross section; between cross sections, the boundaries were developed photogrammetrically, using aerial photographs at a scale of 1:4800 (Reference 7).

In cases where the 100- and 500-year flood boundaries are close together, only the 100-year flood boundary has been shown.

Approximate flood boundaries in some portions of the study area were taken from the Federal Insurance Administration's Flood Hazard Boundary Map (Reference 8).

Flood boundaries for the 100- and 500-year floods are shown on the Flood Boundary and Floodway Map (Exhibit 2).

Small areas within the flood boundaries may lie above the flood elevations and, therefore, not be subject to flooding; owing to limitations of the map scale, such areas are not shown.

4.2 Floodways

Encroachment on flood plains, such as artificial fill, reduces the flood-carrying capacity and increases flood heights, thus increasing flood hazards in areas beyond the encroachment itself. One aspect of flood plain management involves balancing the economic gain from flood plain development against the resulting increase in flood hazard. For purposes of the National Flood Insurance Program, the concept of a floodway is used as a tool to assist local communities in this aspect of flood plain management. Under this concept, the area of the 100-year flood is divided into a floodway and a floodway fringe. The floodway is the channel of a stream, plus any adjacent flood plain areas, that must be kept free of encroachment in order that the 100-year flood be carried without substantial increases in flood heights. As minimum standards, the Federal Insurance Administration limits such increases in flood heights to 1.0 foot, provided that hazardous velocities are not produced.

The floodway delineated for this study was computed on the basis of equal conveyance reduction from each side of the flood plain. The results of these computations are tabulated at selected cross sections for each stream segment for which a floodway is computed (Table 2).

As shown on the Flood Boundary and Floodway Map (Exhibit 2), the floodway boundaries were determined at cross sections; between cross sections, the boundaries were interpolated. In cases where the floodway and 100-year flood boundaries are close together, only the floodway boundary has been shown.

The area between the floodway and the boundary of the 100-year flood is termed the floodway fringe. The floodway fringe thus encompasses the portion of the flood plain that could be completely obstructed without increasing the water-surface elevation of the 100-year flood more than 1.0 foot at any point. Typical relationships between the floodway and the floodway fringe and their significance to flood plain development are shown in Figure 2.

FLOODING SOURCE		FLOODWAY			BASE FLOOD WATER-SURFACE ELEVATION [1]			
CROSS SECTION	DISTANCE [2]	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
					(FEET NGVD)			
Hams Fork								
AA	42.89	121	608	6.0	6899.7	6899.7	6900.7	1.0
AB	43.09	80	504	7.2	6904.4	6904.4	6905.1	0.7
AC	43.34	358	1723	2.1	6906.3	6906.3	6907.3	1.0
AD	43.64	65	307	11.9	6908.1	6908.1	6908.1	0.0
AE	43.70	61	355	10.3	6910.9	6910.9	6910.9	0.0
AF	43.82	1150	3543	1.0	6912.0	6912.0	6912.9	0.9
AG	44.24	1121 [3]	2030	1.8	6914.9	6914.9	6914.9	0.0
AH	44.39	124	601	6.1	6916.2	6916.2	6916.2	0.0
AI	44.50	140	1118	3.3	6919.3	6919.3	6919.3	0.0
AJ	44.55	151	725	5.0	6919.9	6919.9	6920.6	0.7
AK	44.69	164	832	4.4	6920.9	6920.9	6921.4	0.5
AL	44.90	116	728	5.0	6921.8	6921.8	6922.4	0.6

[1] Water-Surface Elevations Without Considering Ice-Jam Effects [2] Miles Above Mouth [3] Width Does Not Include Island

TABLE 2

FEDERAL EMERGENCY MANAGEMENT AGENCY

LINCOLN COUNTY, WY

(UNINCORPORATED AREAS)

FLOODWAY DATA

HAMS FORK

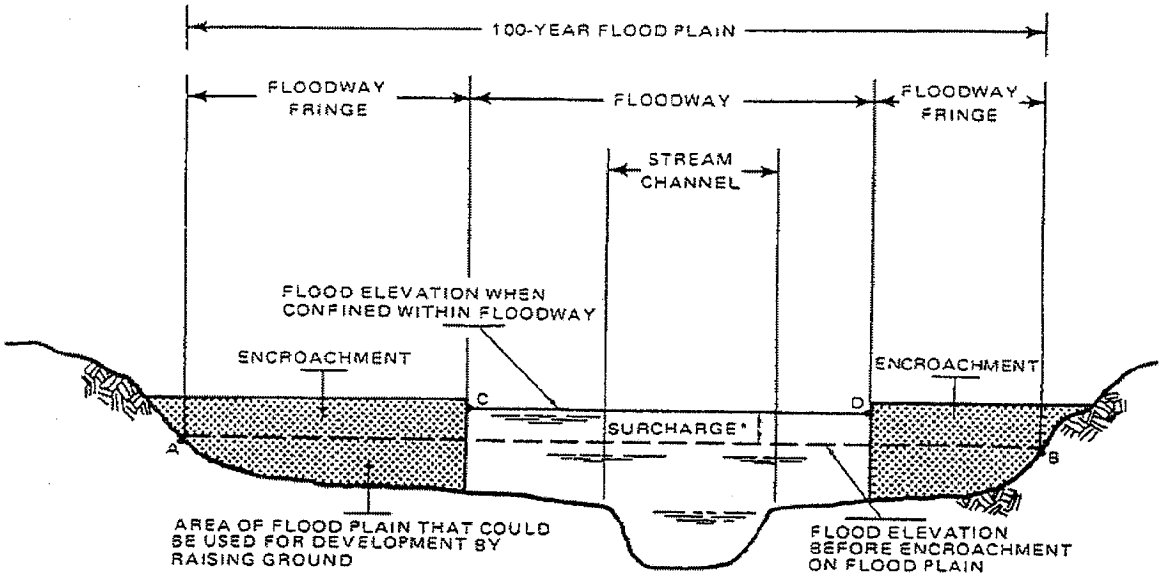

Figure 2. Floodway Schematic

5.0 INSURANCE APPLICATION

In order to establish actuarial insurance rates, the Federal Insurance Administration has developed a process to transform the data from the engineering study into flood insurance criteria. This process includes the determination of reaches, Flood Hazard Factors, and flood insurance zone designations for each flooding source studied in detail affecting the unincorporated areas of Lincoln County.

5.1 Reach Determinations

Reaches are defined as lengths of watercourses having relatively the same flood hazard, based on the average weighted difference in water-surface elevations between the 10- and 100-year floods. This difference does not have a variation greater than that indicated in the following table for more than 20 percent of the reach:

Average Difference Between 10- and 100-year Floods	Variation
Less than 2 feet	0.5 foot
2 to 7 feet	1.0 foot
7.1 to 12 feet	2.0 feet
More than 12 feet	3.0 feet

The location of the reaches determined for the flooding sources of Lincoln County are shown on the Flood Profiles (Exhibit 1).

5.2 Flood Hazard Factors

The Flood Hazard Factor (FHF) is the Federal Insurance Administration device used to correlate flood information with insurance rate tables. Correlations between property damage from floods and their FHF are used to set actuarial insurance premium rate tables based on FHFs from 005 to 200.

The FHF for a reach is the average weighted difference between the 10- and 100-year flood water-surface elevations expressed to the nearest one-half foot, and shown as a three-digit code. For example, if the difference between water-surface elevations of the 10- and 100-year floods is 0.7 foot, the FHF is 005; if the difference is 1.4 feet, the FHF is 015; if the difference is 5.0 feet, the FHF is 050. When the difference between the 10- and 100-year water-surface elevations is greater than 10.0 feet, accuracy for the FHF is to the nearest foot.

5.3 Flood Insurance Zones

After the determination of reaches and their respective Flood Hazard Factors, the unincorporated areas of Lincoln County were divided into zones, each having a specific flood potential or hazard. Each zone was assigned one of the following flood insurance zone designations:

Zone A: Special Flood Hazard Areas inundated by the 100-year flood, determined by approximate methods; no base flood elevations shown or Flood Hazard Factors determined.

Zone A2: Special Flood Hazard Areas inundated by the 100-year flood, determined by detailed methods; base flood elevations shown, and zones subdivided according to Flood Hazard Factors.

Zone B:	Areas between the Special Flood Hazard Areas and the limits of the 500-year flood, including areas of the 500-year flood plain that are protected from the 100-year flood by dike, levee, or other water control structure; also areas subject to certain types of 100-year shallow flooding where depths are less than 1.0 foot; and areas subject to 100-year flooding from sources with drainage areas less than 1 square mile. Zone B is not subdivided.
Zone C:	Areas of minimal flooding.
Zone D:	Areas of undetermined, but possible flood hazard.

The flood elevation differences, Flood Hazard Factors, flood insurance zones, and base flood elevations for each flooding source studied in detail in the county are summarized in Table 3.

5.4 Flood Insurance Rate Map Description

The Flood Insurance Rate Map for the unincorporated areas of Lincoln County is, for insurance purposes, the principal result of the Flood Insurance Study. This map (published separately) contains the official delineation of flood insurance zones and base flood elevation lines. Base flood elevation lines show the locations of the expected whole-foot water-surface elevations of the base (100-year) flood. This map is developed in accordance with the latest flood insurance map preparation guidelines published by the Federal Insurance Administration.

6.0 OTHER STUDIES

The Federal Insurance Administration published Flood Insurance Studies for the Towns of Diamondville and Kemmerer, and Uinta County, Wyoming (References 9, 10, and 11, respectively). Those studies are in general agreement with this study.

The Federal Insurance Administration Flood Hazard Boundary Map (Reference 8) was used directly for approximate areas in portions of this study.

This study is authoritative for the purposes of the National Flood Insurance Program; data presented herein either supersede or are compatible with all previous determinations.

7.0 LOCATION OF DATA

Information concerning the pertinent data used in the preparation of this study can be obtained by contacting the Federal Emergency Management Agency, Mitigation Division, Denver Federal Center, Building 710, Box 25267, Denver, Colorado 80225-0267.

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9.0 REVISION DESCRIPTIONS

This section has been added to provide information regarding significant revisions made since the original Flood Insurance Study (FIS) was printed. Future revisions may be made that do not result in the republishing of the FIS. To assure that any user is aware of all revisions, it is advisable to contact the community repository of flood hazard data located at the Lincoln County Planning Department, 520 Topaz Street, Kemmerer, Wyoming 83101.

9.1 First Revision

This study was revised on September 21, 1998, to update floodplain information for Smiths and South Forks and Spring Creek in Lincoln County, Wyoming, to include more detailed hydrologic and hydraulic information and to reflect updated corporate limits within the county.

The hydrologic and hydraulic analyses for this restudy were performed by Foothill Engineering Consultants, Inc., the study

contractor, for the Federal Emergency Management Agency (FEMA), under Contract No. EMW-93-C-150. This restudy was completed in January 1996.

The streams were identified in an initial Consultation Coordination Officer (CCO) meeting held on April 4, 1994. The meeting was attended by representatives of FEMA, the U.S. Geological Survey (USGS), the Town of Cokeville, and the study contractor.

The Smiths Fork tri-diversion structure divides flood flows from Smiths Fork proportionately among three channels: Smiths and South Forks and Spring Creek. When flood levels threaten structures within the Town of Cokeville corporate limits, all additional floodwater is diverted down the Smiths Fork River channel. The Smiths Fork tri-diversion structure is located approximately 1,200 feet northeast of the northern corporate boundary of the Town of Cokeville, along Smiths Fork within the unincorporated areas of Lincoln County.

The Smiths Fork study reach (2.4 miles) is entirely within Lincoln County, and only a small portion of the South Fork study reach (1.7 miles) is within the Town of Cokeville. Most of the Spring Creek study reach (1.7 miles) is within the Town of Cokeville. Because of historical flooding, floods caused by the overflow of Smiths and South Forks and Spring Creek were restudied using more detailed information than that used for the previous Flood Insurance Rate Map (FIRM) for the unincorporated areas of Lincoln County (Reference 12). These areas were selected with consideration given to all proposed construction and forecast development through December 1996.

At present, levees exist on Smiths Fork between the Union Pacific Railroad and U.S. Highway 30. The levee along the north bank was constructed in 1982 by the Wyoming Emergency Civil Defense Department. The levee along the south bank was constructed in 1986 with U.S. Army Corps of Engineers (USACE) funding as part of a flood fight. While both the north- and south-bank levees were intended to be temporary structures, the south-bank levee was improved and upgraded in 1995 according to the Natural Resources Conservation Service (NRCS) (formerly the Soil Conservation Service) and the Cokeville Watershed Improvement District (CWID). These levees will not contain the 100-year flood.

Lincoln County has experienced primarily shallow flooding from Smiths Fork on a number of occasions. Flooding occurred in high-snowpack years during the 1960s and 1970s. In 10 years during those two decades, the peak discharge exceeded 1,000 cubic feet per second (cfs), with 1971 having the highest discharge of 1,610 cfs. However, the high-runoff years of 1982, 1983, 1984, and 1986 resulted in discharges ranging from 1,490 to 2,100 cfs. The flooding during those years was partially mitigated by completion of emergency flood-control measures with assistance from the USACE. Those measures included clearing and snagging of vegetation within the Smiths Fork channel and construction of temporary emergency levees at locations along Smiths Fork as previously described. The reported flooding usually consisted of slight inundation of fields within the unincorporated areas of Lincoln County, but approximately 20 residential structures on the west end of the Town of Cokeville were affected by shallow flooding or elevated water table levels in 1983. Base flood flows in Spring Creek, which are controlled at the Smiths Fork tri-diversion structure, are contained within the channel.

Cross-section data for Smiths and South Forks and Spring Creek were obtained from several sources. These included field surveys in 1983 by the NRCS and in 1994 by a private surveying contractor, 1981 aerial contour mapping (Reference 13), and USGS 7.5-minute series topographic mapping (Reference 14). Structural geometry for bridges and culverts was also obtained during the field survey effort.

For Smiths and South Forks and Spring Creek, the floodplain boundaries were delineated using USGS topographic mapping at a scale of 1:24,000, with a contour interval of 20 feet (Reference 14).

Shallow flooding limits (Zone X, shaded) adjacent to South Fork northwest of the Town of Cokeville are a result of overflow from Smiths Fork. These shallow flooding limits have been delineated by NRCS personnel and are based on historical flooding that occurred during the high-runoff years of 1983 and 1984. This delineation is supported by Town personnel based on their judgment, personal knowledge, and interviews with landowners in that area.

The Smiths Fork basin consists of scrubby sagebrush, pasture, and limited trees. The Smiths Fork drainage basin is a high mountain tributary of the Bear River, located on the western border of Wyoming. Smiths Fork drains an area of approximately 275 square miles just upstream of the tri-diversion structure, and elevations in the basin range from 6,200 feet to over 10,300 feet at the upper basin limits. Land use in the watershed is approximately 77 percent rangeland, 14 percent forest land, and the remainder irrigated and dry-land farming. Average annual precipitation in the lower elevations of the basin is approximately 13 inches. The majority of precipitation falls as snow. On average, 70 inches can be expected to accumulate as snow in the higher elevations. The characteristics of the sedimentary geologic environment in the upper part of the watershed can be classified generally as siltstone, limestone, and sandstone. The soils in the basin can be classified generally as inorganic, gravelly, sandy, and clean clays. The soils support herbaceous ground cover with shallow root systems and a variety of indigenous grasses.

The hydrologic analysis for Smiths Fork consisted of obtaining annual peak streamflow records for Smiths Fork at the Border, Wyoming, gage and performing a frequency analysis fitting a log-Pearson Type III distribution in accordance with guidelines found in Interagency Advisory Committee on Water Data Bulletin No. 17B, "Guidelines for Determining Flood Flow Frequency" (Reference 15). The analysis was completed using the USACE HEC-FFA computer program (Reference 16).

For Smiths Fork, annual peak streamflow records were obtained for both the Border gage (Gage No. 10032000, drainage area = 165 square miles) for the years 1942 through 1992, and the Cokeville gage (Gage No. 10032500, drainage area = 275 square miles) for the years 1942 through 1952. The 11 years of overlapping records for the two gages were compared, and it was determined that annual peak flows at the Cokeville gage were approximately 2.4 percent higher than peak flows at the Border gage, on average, despite the substantial difference in drainage areas. As such, the annual peak flows for the Border gage were used to perform a frequency analysis, and those results were

increased by 2.4 percent to represent computed peak discharges at the Cokeville gage. Based on Bulletin No. 17B, a regional map skew coefficient of -0.35 was selected and used in the analysis.

A rainfall-runoff model was developed for the Spring Creek drainage basin, where a unit hydrograph was derived for the basin in accordance with the procedure outlined in the U.S. Bureau of Reclamation publication "Flood Hydrology Manual" (Reference 17). Rainfall-depth data were obtained from the National Oceanic and Atmospheric Administration NOAA Atlas 2, "Precipitation Frequency of the Western United States, Volume II - Wyoming" (Reference 18). Other hydrology modeling parameters, such as basin area and slope and channel routing geometry and slope, were obtained from USGS 7.5-minute series topographic maps (Reference 14) and field observations.

The primary source of flooding occurs downstream of the tri-diversion structure. The tri-diversion structure trifurcates the flow from the Smiths Fork drainage basin into Smiths and South Forks and Spring Creek. The tri-diversion structure is located in Lincoln County, approximately 1,200 feet northeast of the northern corporate boundary of the Town of Cokeville. To prevent floodwater from overtopping the channel banks of Spring Creek and flooding the Town of Cokeville and parts of the unincorporated areas of Lincoln County, operational guidelines to strictly administer the three-way flow were developed between the Town of Cokeville and the CWID. The 100-year discharge for Smiths Fork above the tri-diversion structure is 2,160 cfs. As determined by the NRCS and the CWID, the channel banks of Spring Creek can contain a capacity of 20 percent (425 cfs) of the Smiths Fork 100-year discharge before overflow occurs. Six percent (125 cfs) of the Smiths Fork trifurcated flow would be diverted down South Fork, and 74 percent (1,550 cfs) would remain in Smiths Fork.

However, Spring Creek has a secondary source of flooding contributing to its total flow. The total flow in Spring Creek is a combination of the trifurcated Smiths Fork flow and the uncontrolled Spring Creek drainage basin flow that intersects with the trifurcated Smiths Fork flow approximately 1,200 feet downstream of the tri-diversion structure at the Town of Cokeville corporate limits.

To determine the maximum total flow for Spring Creek, the 100-year flood event for the Spring Creek drainage basin was modeled. The 100-year peak discharge for the Spring Creek drainage basin from the 5.3-square-mile Spring Creek basin was 265 cfs. When the Spring Creek drainage basin experiences a 100-year flood event, it was estimated that Smiths Fork experiences a corresponding 10-year flood event. In accordance with the tri-diversion agreement, the 1,540-cfs discharge from the 10-year flood event on Smiths Fork would result in trifurcated flows as follows: 13 percent (200 cfs) diverted to Spring Creek, 6 percent (90 cfs) diverted to South Fork, and 81 percent (1,250 cfs) remaining in Smiths Fork. Combining the flow from the trifurcated Smiths Fork 10-year flood event that eventually intersects with Spring Creek with that of the flow from the Spring Creek drainage basin 100-year flood event results in a base discharge of 465 cfs for Spring Creek.

Water-surface elevations (WSELs) were computed using the USACE HEC-2 computer program (Reference 19). Water-surface profiles for South Fork and Spring Creek were determined for the 100-year flood only, and were drawn to a plotted accuracy of 0.5 foot.

Channel roughness coefficients (Manning's "n" values) used in the hydraulic computations were chosen by engineering judgment based on field observations and photographs of the floodplain areas. Channel and overbank values for Smiths and South Forks and Spring Creek are shown in Table 3, "Manning's "n" Values."

A floodway analysis was not included in the scope of work; therefore, no floodways are shown on Smiths Fork, South Fork, or Spring Creek.

Table 1, "Summary of Discharges," and Exhibit 1, "Flood Profiles," were revised, and Table 3, "Manning's "n" Values," was added to reflect changes as a result of the restudy.

9.2 Second Revision

This FIS was revised on June 17, 2003, to incorporate the effects of flooding on the Salt River. The hydrologic and hydraulic analyses for this study were initially performed by Foothill Engineering Consultants, Inc. (Foothill Engineering), for FEMA under Contract No. EMW-93-C-4150 (Reference 20). This work, which was completed in April 1998, covered the Salt River from its confluence with the Snake River to 1 mile downstream of the Town of Thayne. Subsequently, the USGS, in cooperation with Lincoln County, prepared a study (Reference 21) for the reach of the Salt River from 1 mile downstream to 6 miles upstream of the Town of Thayne at State Highway 238. The USGS study, completed in 2000, modified the hydrology applicable to the entire Salt River. The USGS revised the hydraulic model developed by Foothill Engineering using the new discharges. These revised Base Flood Elevations (BFEs) were then used to revise the study downstream of Thayne.

The purpose of this restudy was to develop flood hazard information to assist in development planning and for flood insurance purposes. The need for a detailed study of flooding on the Salt River was identified at a meeting attended by representatives of Foothill Engineering, FEMA, and Lincoln County on April 4, 1994.

The original FIS incorporated only approximate study methods for delineating the Salt River floodplain (Reference 12).

Only the 100-year floodplain was delineated for this Salt River study; no floodway or 500-year floodplain were computed.

Hydrologic Analyses

The USGS Study (Reference 21) included gaging station records from USGS Gage No. 13027500 located on the Salt River above the reservoir near Etna, Wyoming (drainage area = 829 square miles). Statistical tests revealed no trends over time; thus, all peak discharge data were used in the analyses. Annual streamflows of the Salt River are characteristic of systems dominated by snowmelt runoff from mountainous areas. A frequency analysis was prepared using the USGS PEAKFQ computer program (References 22 and 23) for

Table 3. Manning's "n" Values

Flooding Source	Roughness Coefficients	
	Channel	Overbanks
Smiths Fork	0.040 - 0.070	0.050 - 0.060
South Fork	0.040 - 0.050	0.050 - 0.060
Spring Creek	0.040 - 0.450	0.060
Salt River	0.035 - 0.045	0.045 - 1.000

the years 1954 through 1997, the period of record for the gage, in accordance with accepted methods described in Bulletin No. 17B of the Hydrology Subcommittee of the Office of Water Data Coordination (Reference 15). This analysis produced a base flood discharge at the gage of 6,120 cfs.

This discharge was then prorated at several upstream points based on drainage area. The equation used for estimating the 100-year peak discharge at an ungaged location of interest in the mountainous regions of Wyoming was determined in the USGS Water-Resources Investigations Report 88-4045 (Reference 24). The 100-year peak discharge for the Salt River that was estimated at USGS Gage No. 13027500 using the PEAKFQ program was decreased. The decreasing drainage area resulted in incremental discharges at each of the tributaries. Final adjusted estimates of the 100-year flood for the study reach ranged from 5,170 cfs at the downstream confluence of Jack Knife Creek with the Salt River to 4,120 cfs at the upstream end of the study reach at State Highway 238 (Reference 21).

Hydraulic Analyses

Analyses of the hydraulic characteristics of flooding from the sources studied were carried out to provide estimates of the elevations of floods of the 100-year recurrence intervals. Users should be aware that flood elevations shown on the FIRM represent rounded whole-foot elevations and may not exactly reflect the elevations shown on the Flood Profiles (Exhibit 1) or in the Floodway Data Table in the FIS report. Flood elevations shown on the FIRM are primarily intended for flood insurance rating purposes. For construction and/or floodplain management purposes, users are cautioned to use the flood elevation data presented in this FIS in conjunction with the data shown on the FIRM.

WSELs for the 100-year flood on the Salt River were computed using the water-surface profile computer program WSPRO (References 25 and 26). Two hydraulic models were developed for this restudy. One included the downstream reach from the confluence with the Snake River to 1 mile downstream of Thayne, and the other covered the reach from 1 mile downstream to 6 miles upstream of Thayne at State Highway 238. The starting WSEL for the downstream reach of the Salt River was determined by the slope-area method. A known WSEL from the downstream model was used for the starting elevation in the upstream reach.

Salt River channel geometry and hydraulic properties were compiled for hydraulic analyses of the 100-year flood. Lincoln County personnel provided open-channel cross-section station and elevation data for the hydraulic analyses. USGS personnel estimated cross-section spacing based on the requirements of the standard step-backwater method. The USGS surveyed bridge-section station and elevation data for backwater analyses at road crossings. The USGS determined roughness coefficients (Manning's "n" values) from field observations and comparison with verified coefficients (References 27 and 28) and from review of aerial photographs. The entire length of the study reach for the Salt River was examined and photographed to help estimate channel roughness coefficients. Table 3, "Manning's "n" Values" was revised to incorporate the results.

The boundaries for the area inundated by the 100-year flood were plotted on USGS 1:24,000-scale Digital Raster Graphics (DRGs) enlarged to 1:12,000. Topographic data, roads, and canals on the DRGs and recent aerial photographs and field observations were reviewed for assistance in plotting the flood boundaries between cross sections. Inundated areas with little or no flow were identified. More precise determination of the extent of inundation may be determined at any given location using the computed WSEL and detailed field surveys of the land surface.

For this restudy, all elevations are referenced to the NGVD. To obtain up-to-date elevation information on National Geodetic Survey (NGS) Elevation Reference Marks (ERMs) shown on this map, please contact the Information Services Branch of the NGS at (301) 713-3242, or visit their website at www.ngs.noaa.gov. Map users should seek verification of non-NGS ERM monument elevations when using these elevations for construction or floodplain management purposes.

The National Flood Insurance Program encourages State and local governments to adopt sound floodplain management programs. To assist in this endeavor, each FIS provides 100-year floodplain data, which may include a combination of the following: 10-, 50-, 100-, and 500-year flood elevations; delineations of the 100-year and 500-year floodplains; and 100-year floodway. This information is presented on the FIRM and in many components of the FIS, including the Flood Profiles, the Floodway Data Table, and the Summary of Discharges Table. Users should reference the data presented in the FIS as well as additional information that may be available at the local Community Map Repository before making flood elevation and/or floodplain boundary determinations.

As part of this revision, the conversion of the FIRM for the unincorporated areas of Lincoln County, Wyoming, to a different format on a panel-to-panel basis was initiated. Previously, flood hazard information was shown on both the FIRM and the Flood Boundary and Floodway Map (FBFM). In the new format, all BFEs, zone designations, cross sections, and floodplain and floodway boundary delineations are shown on the FIRM panels, and the corresponding FBFM panels have been eliminated. The flood insurance zone designations were changed. Areas previously shown as numbered Zone A were revised to Zone AE, Zone B was revised to Zone X (shaded), and Zone C was revised to Zone X (unshaded). In addition, the Flood Insurance Zone Data Table was removed from the FIS, and all zone designations and reach determinations were removed from the Flood Profiles. The FBFM Index has been revised to indicate which panels are in the new format.

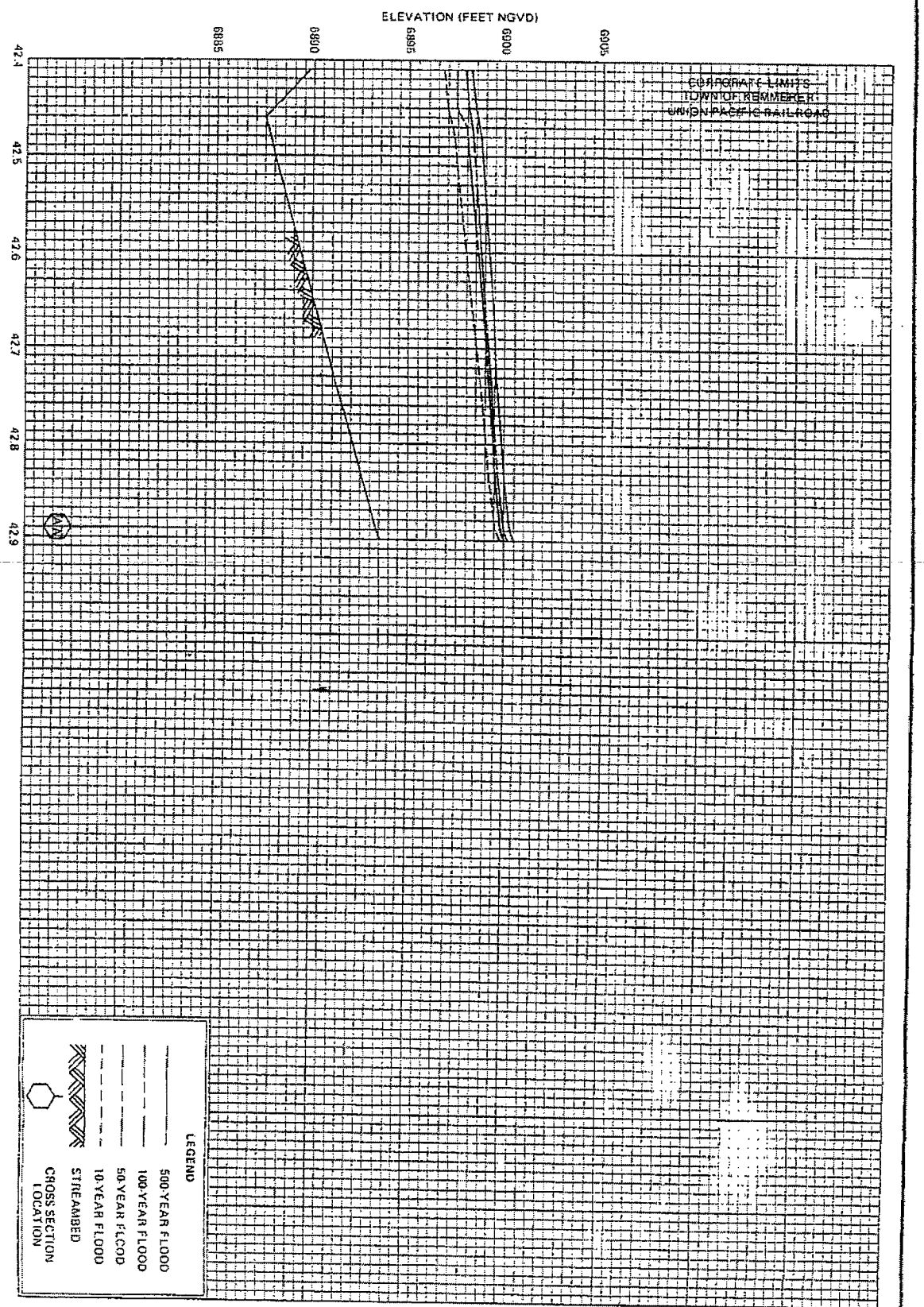
FEDERAL EMERGENCY MANAGEMENT AGENCY

LINCOLN COUNTY, WY
(UNINCORPORATED AREAS)

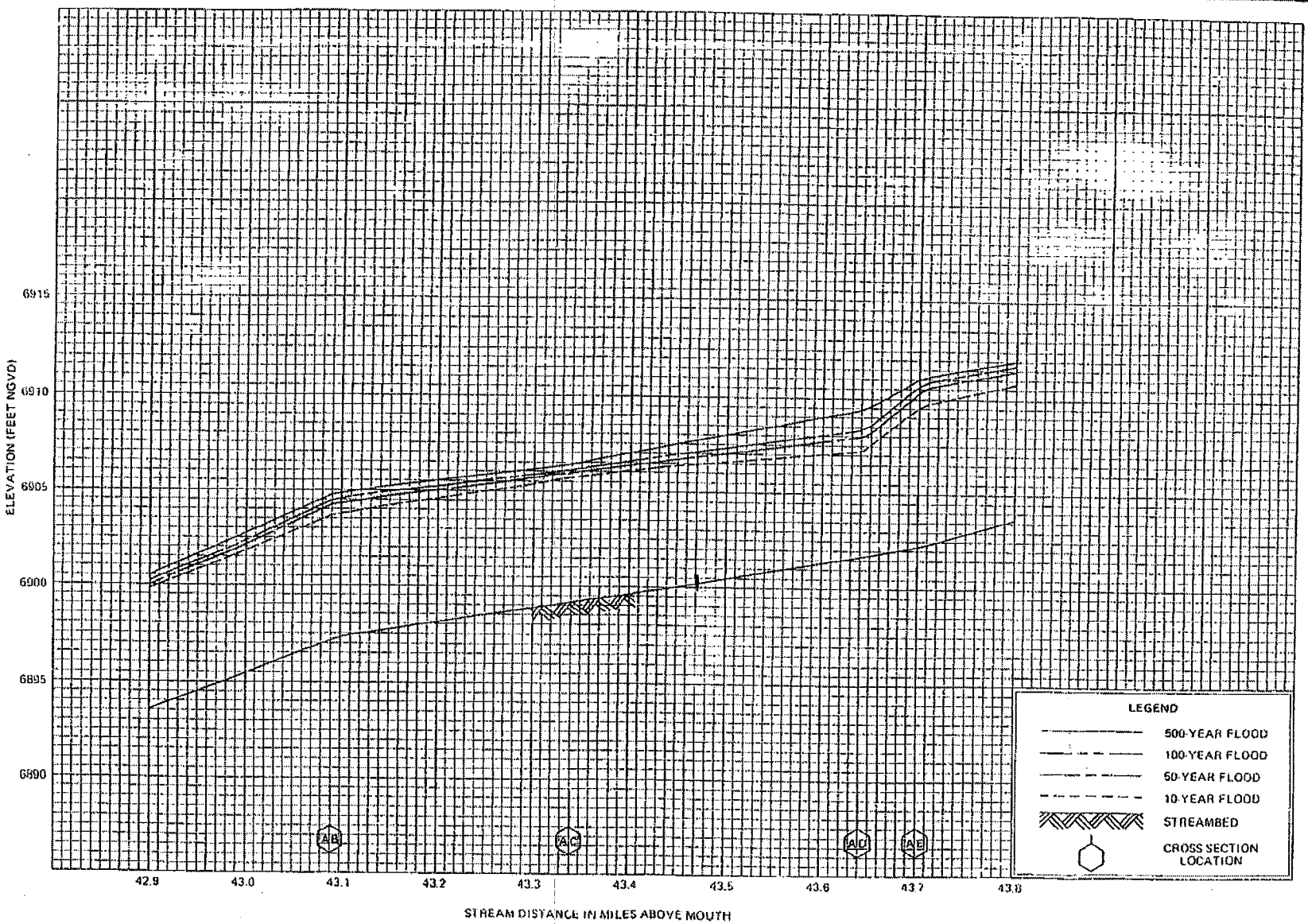
FLOOD PROFILES

HAMS FORK

01P



02P	FEDERAL EMERGENCY MANAGEMENT AGENCY LINCOLN COUNTY, WY (UNINCORPORATED AREAS)	FLOOD PROFILES HAMS FORK



FLOOD PROFILES

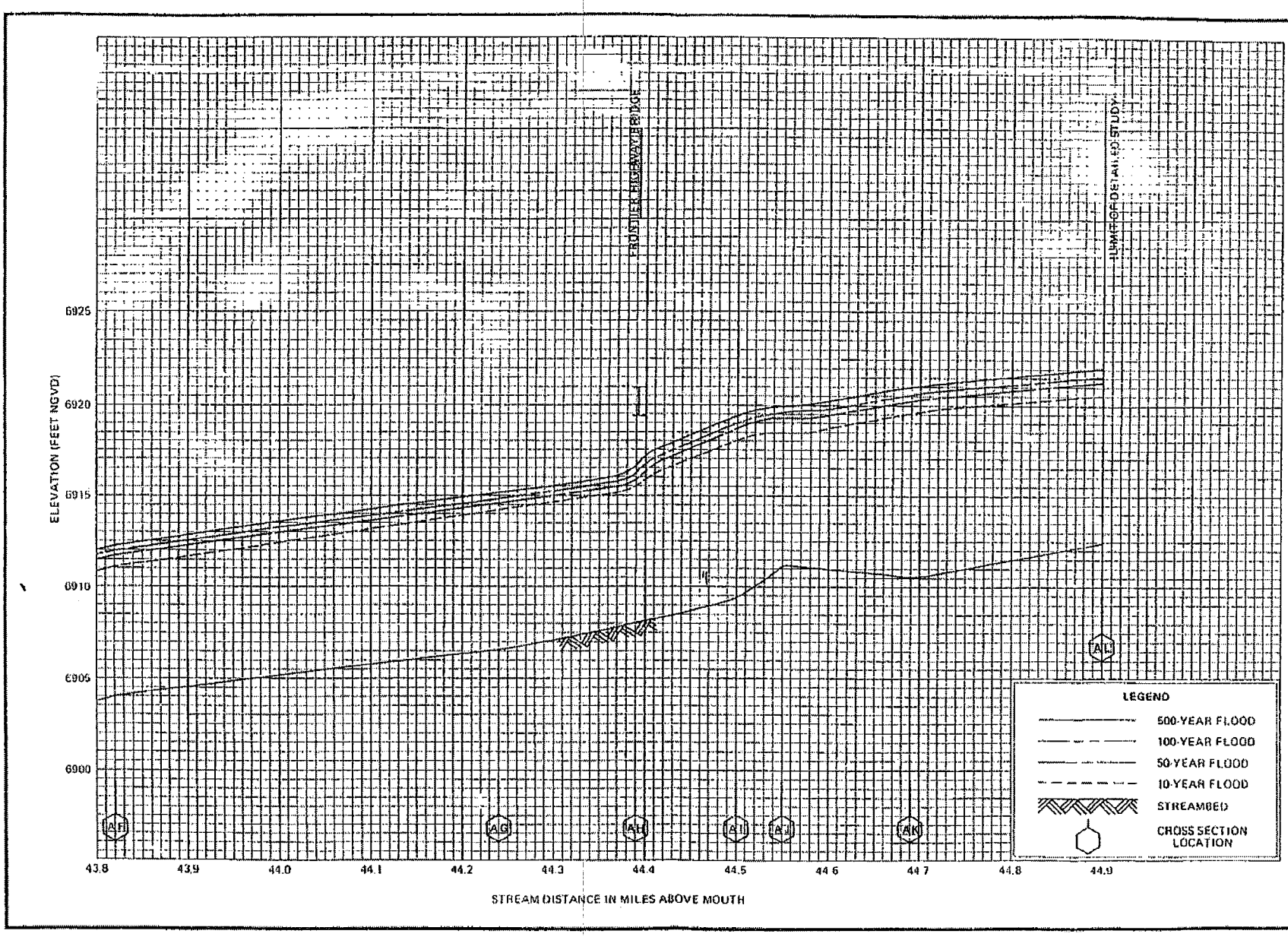
HAMS FORK

FEDERAL EMERGENCY MANAGEMENT AGENCY

LINCOLN COUNTY, WY

(UNINCORPORATED AREAS)

03P



FLOOD PROFILES

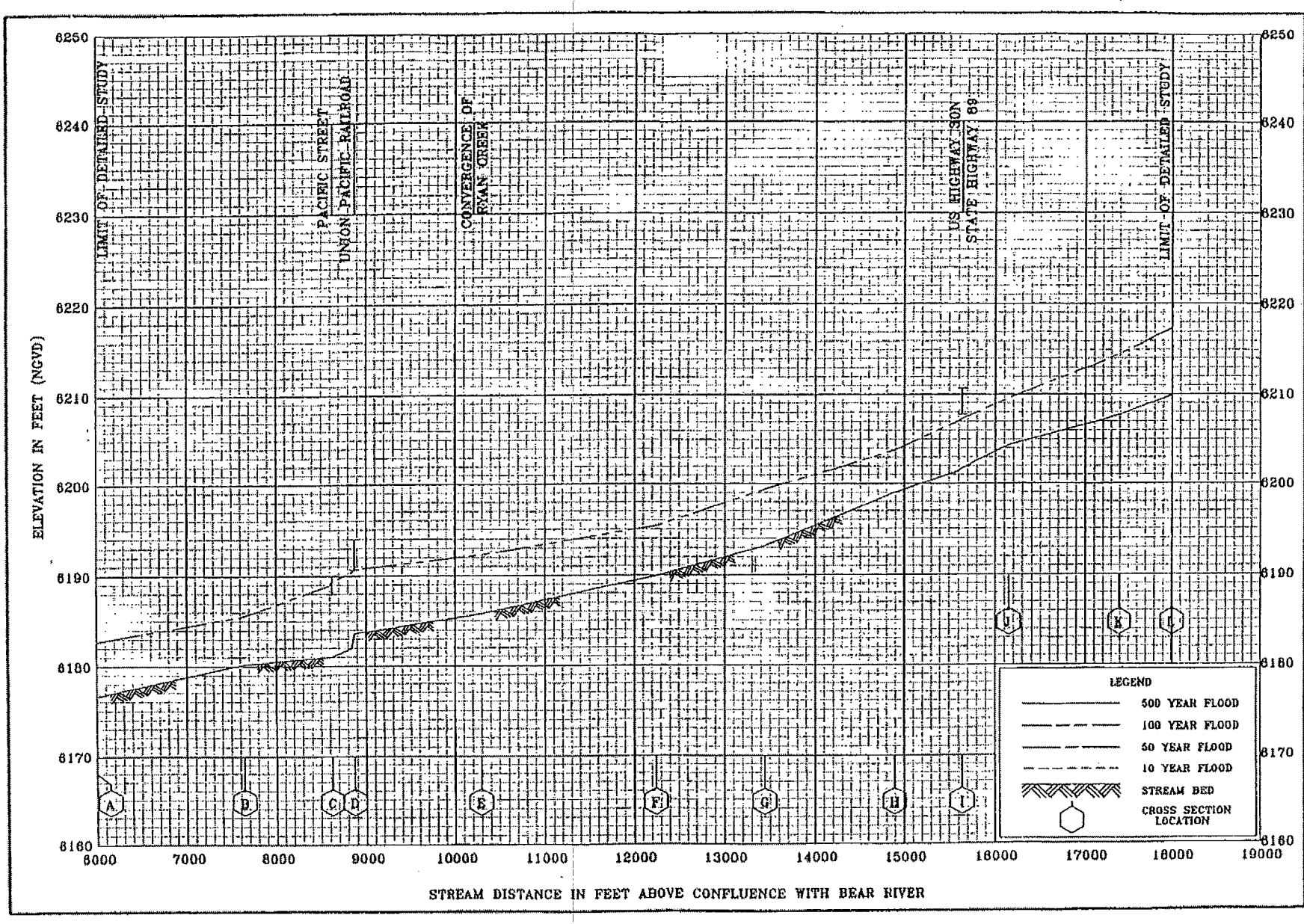
HAMS FORK

FEDERAL EMERGENCY MANAGEMENT AGENCY

LINCOLN COUNTY, WY

(UNINCORPORATED AREAS)

04P



FEDERAL EMERGENCY MANAGEMENT AGENCY

LINCOLN COUNTY, WY.

(UNINCORPORATED AREAS)

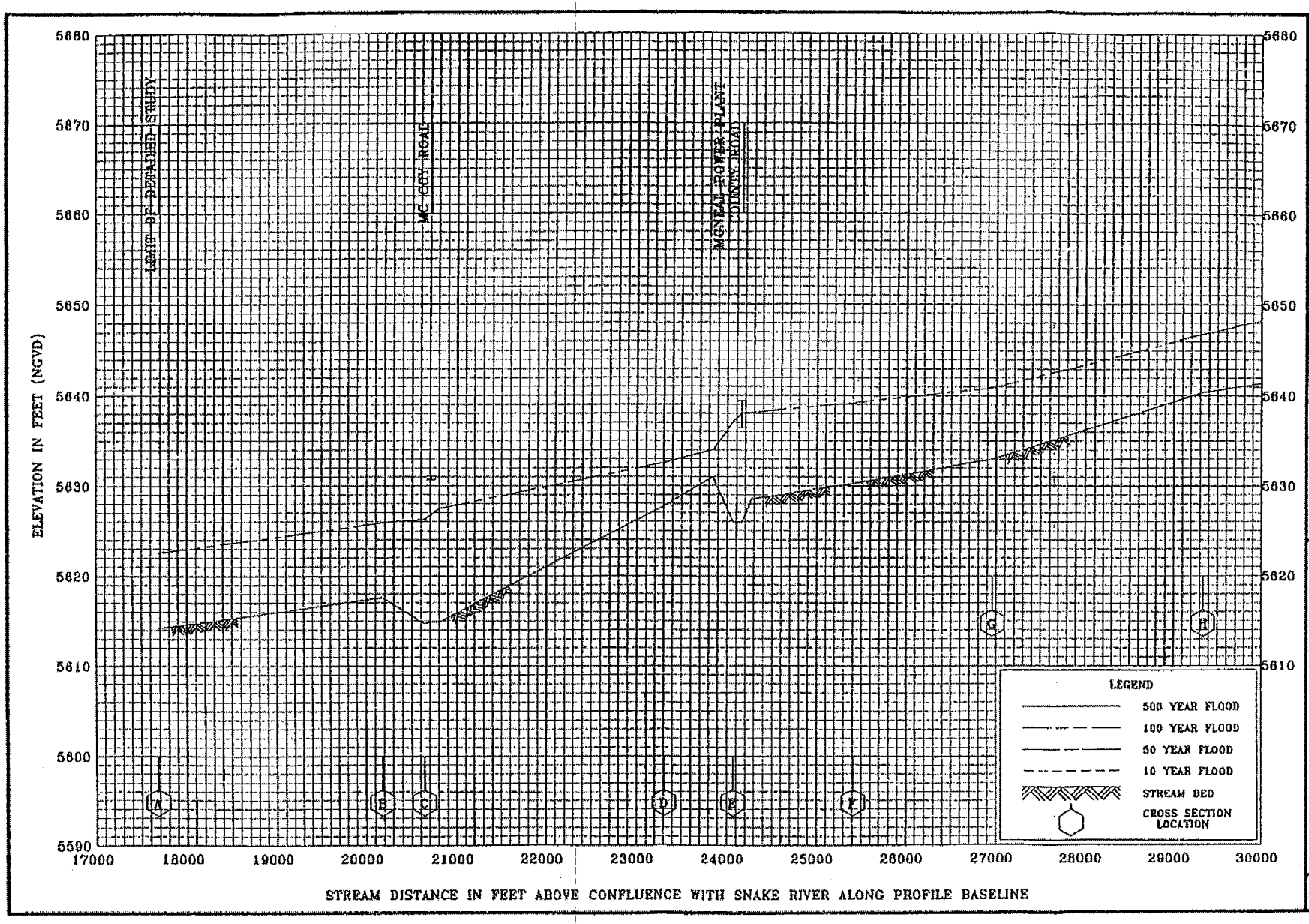
FLOOD PROFILES

SMITHS FORK

05P

06P	FEDERAL EMERGENCY MANAGEMENT AGENCY LINCOLN COUNTY, WY (UNINCORPORATED AREAS)	FLOOD PROFILES SOUTH FORK

07P	FEDERAL EMERGENCY MANAGEMENT AGENCY LINCOLN COUNTY, WY (UNINCORPORATED AREAS)	FLOOD PROFILES SPRING CREEK



FLOOD PROFILES

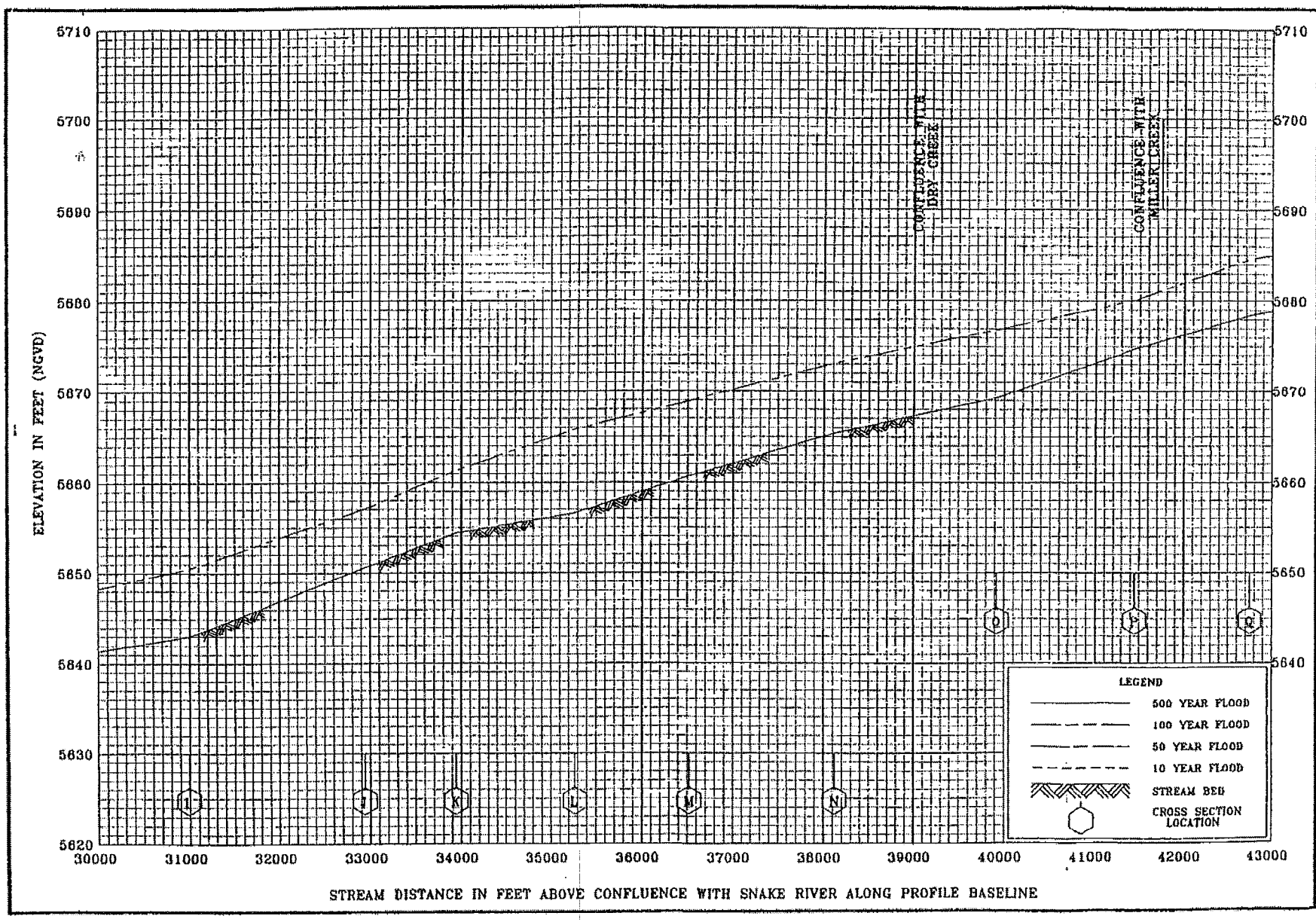
SALT RIVER

FEDERAL EMERGENCY MANAGEMENT AGENCY

LINCOLN COUNTY, WY

(UNINCORPORATED AREAS)

08P



FLOOD PROFILES

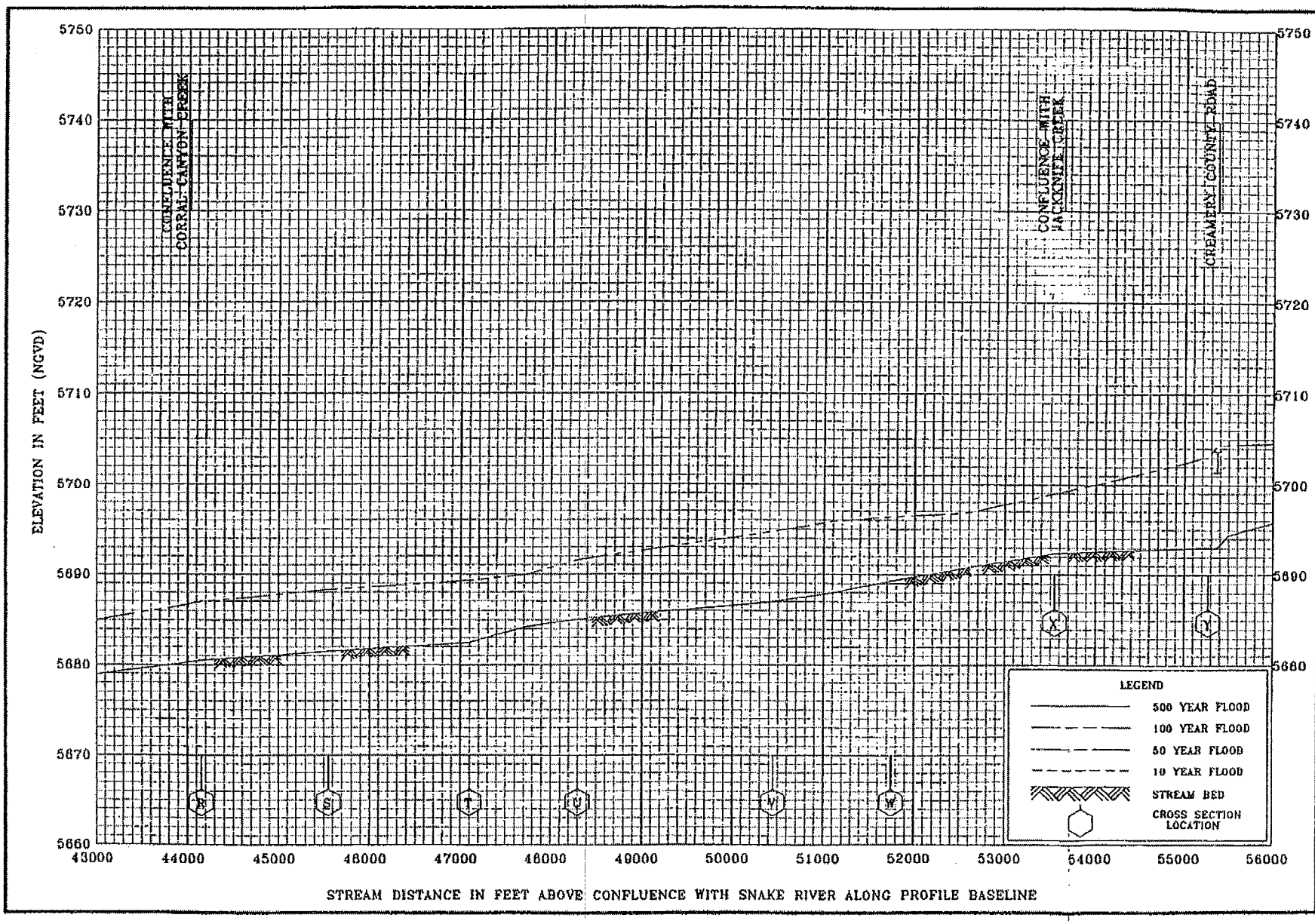
SALT RIVER

FEDERAL EMERGENCY MANAGEMENT AGENCY

LINCOLN COUNTY, WY

(UNINCORPORATED AREAS)

09P



FLOOD PROFILES

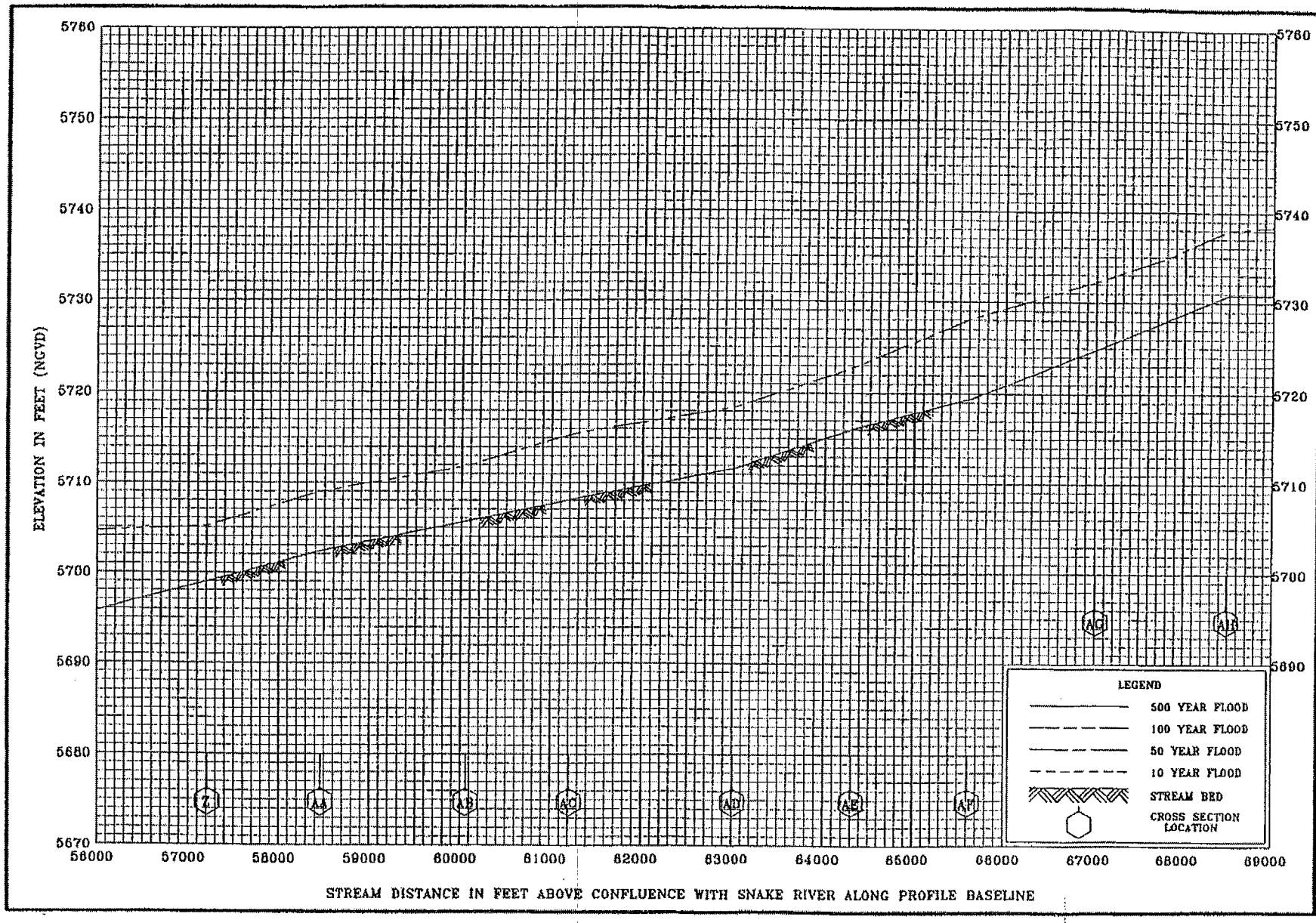
SALT RIVER

FEDERAL EMERGENCY MANAGEMENT AGENCY

LINCOLN COUNTY, WY

UNINCORPORATED AREAS

10P



FLOOD PROFILES

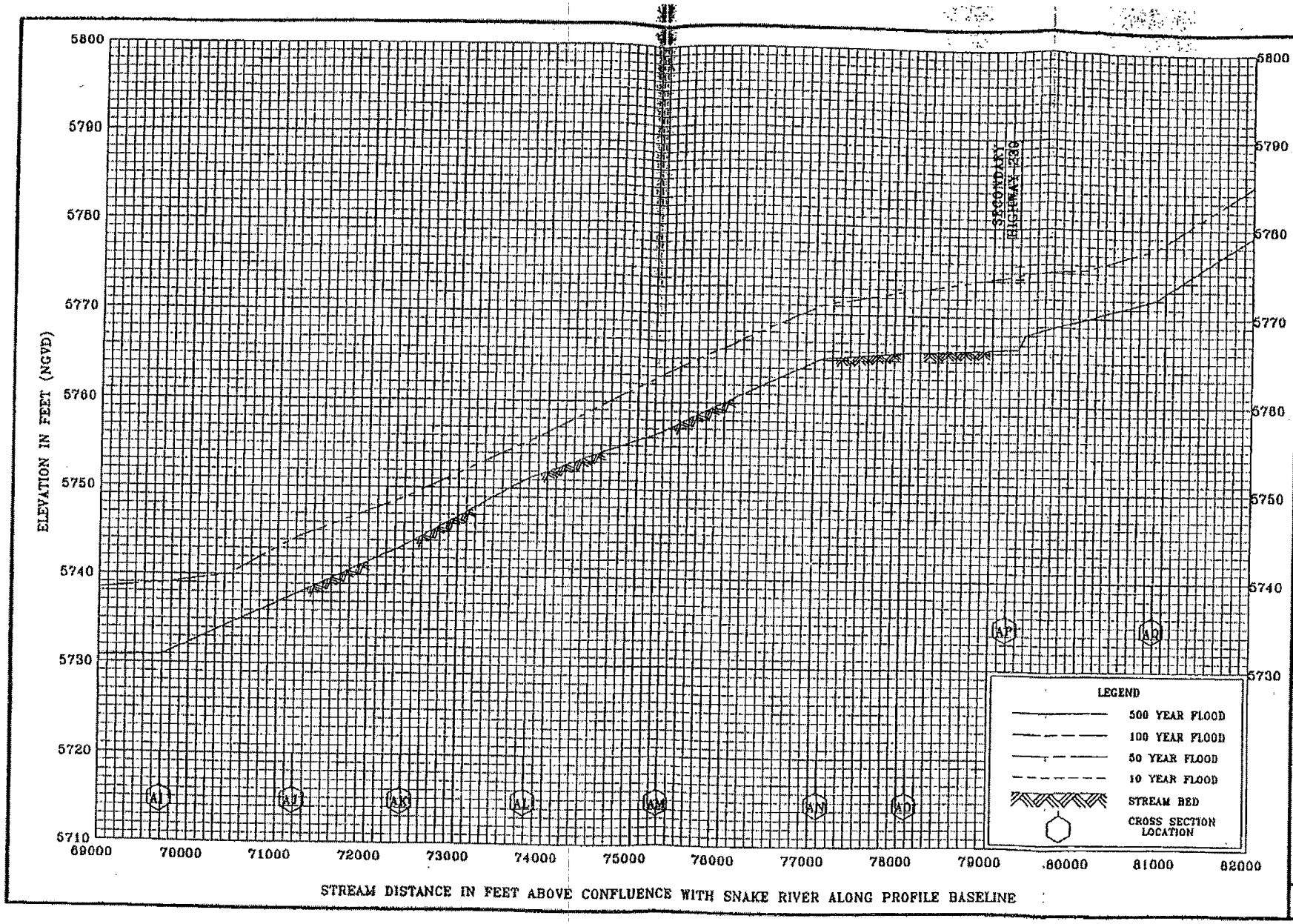
SALT RIVER

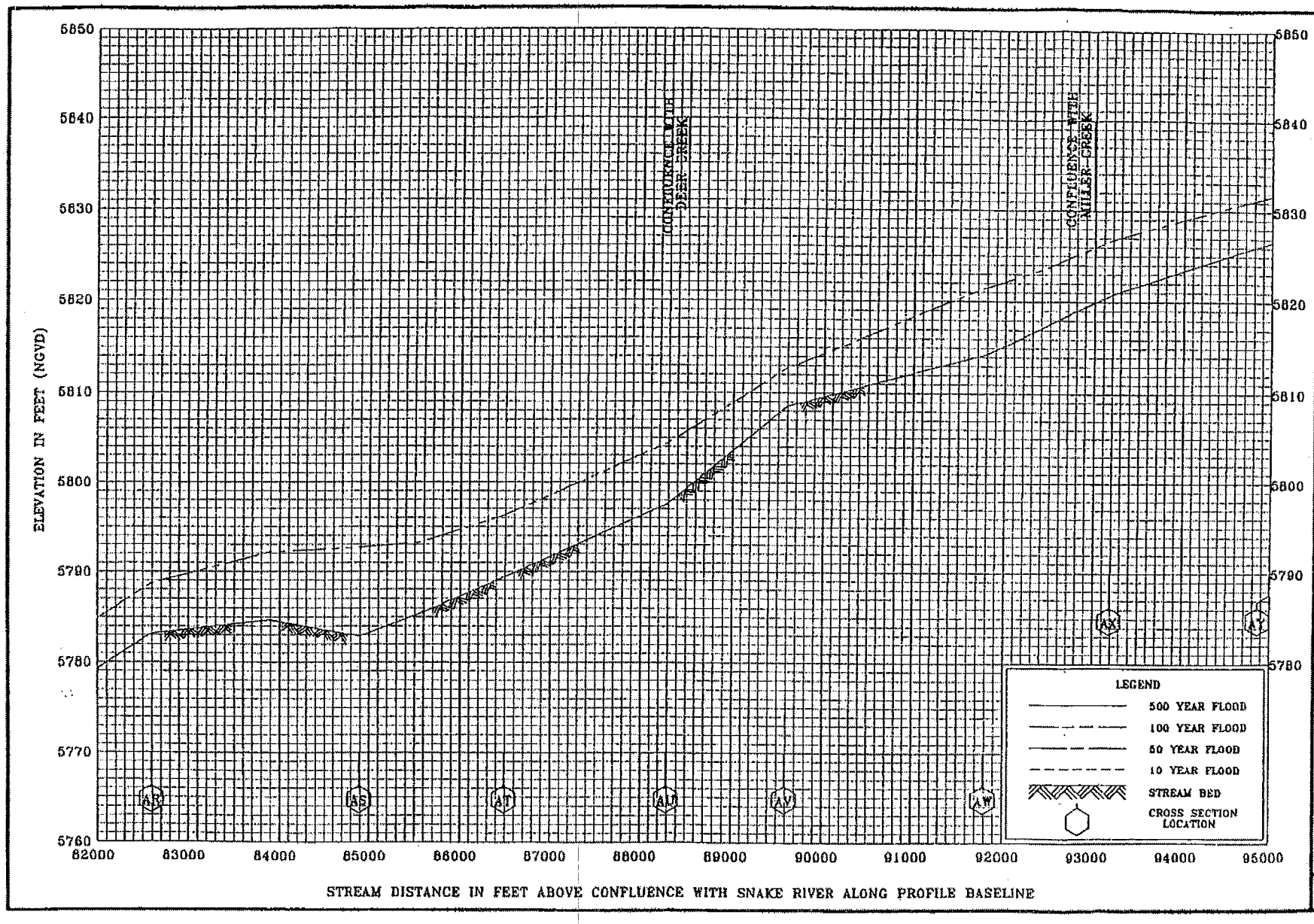
FEDERAL EMERGENCY MANAGEMENT AGENCY

LINCOLN COUNTY, WY

(UNINCORPORATED AREAS)

11P


ELEVATION IN FEET (NGVD)
5800
5790
5780
5770
5760
5750
5740
5730
5720
5710
69000
70000
71000
72000
73000
74000
75000
76000
77000
78000
79000
80000
81000
82000
STREAM DISTANCE IN FEET ABOVE CONFLUENCE WITH SNAKE RIVER ALONG PROFILE BASELINE
SECONDARY HIGHWAY 238
AJ
AJ1
AK
AL
AM
AN
AO
AP
AR
LEGEND
500 YEAR FLOOD
100 YEAR FLOOD
50 YEAR FLOOD
10 YEAR FLOOD
STREAM BED
CROSS SECTION LOCATION
FLOOD PROFILES
SALT RIVER
FEDERAL EMERGENCY MANAGEMENT AGENCY
LINCOLN COUNTY, WY
(UNINCORPORATED AREAS)
12P



FLOOD PROFILES

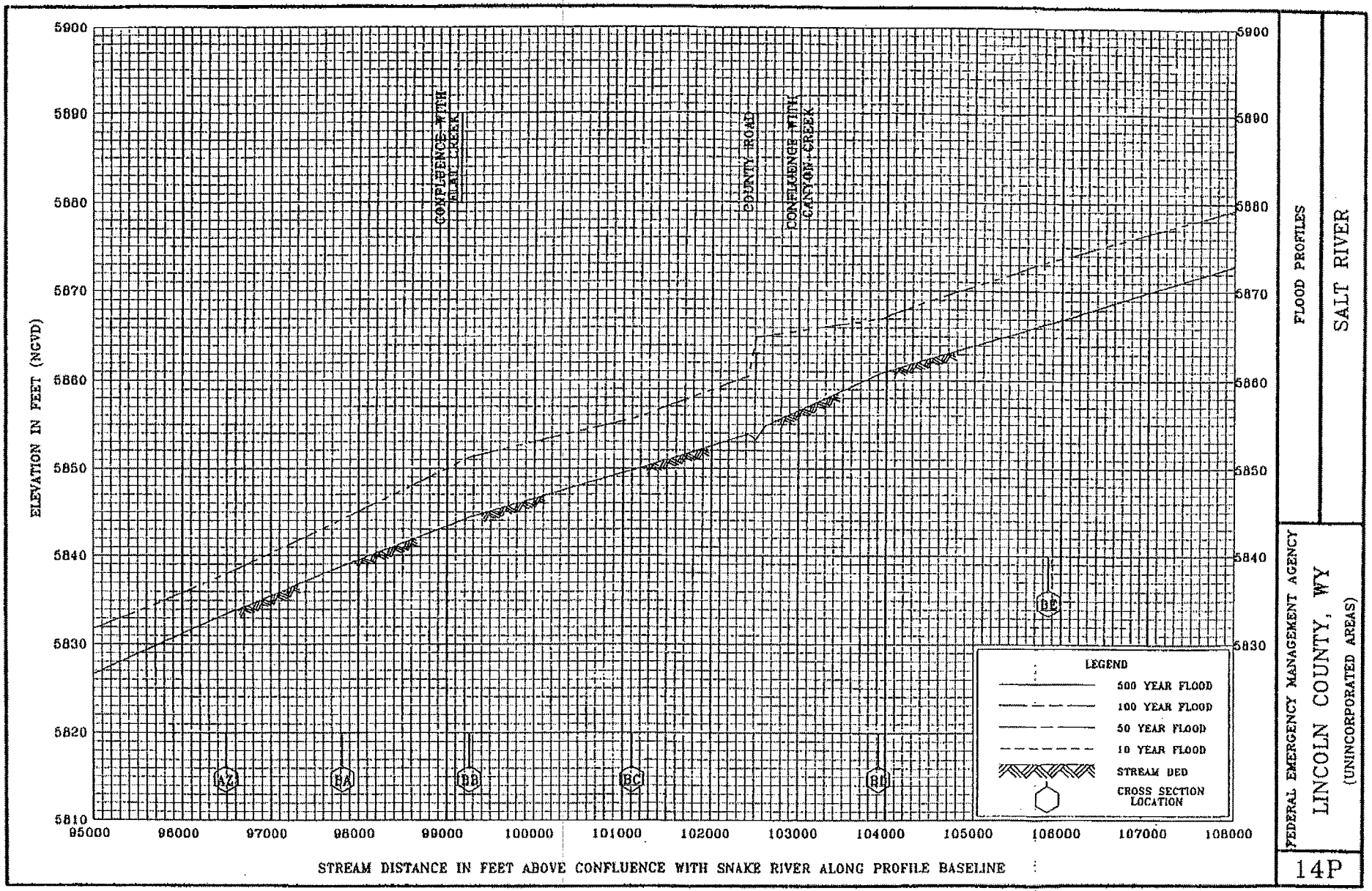
SALT RIVER

FEDERAL EMERGENCY MANAGEMENT AGENCY

LINCOLN COUNTY, WY

(UNINCORPORATED AREAS)

13P



FLOOD PROFILES

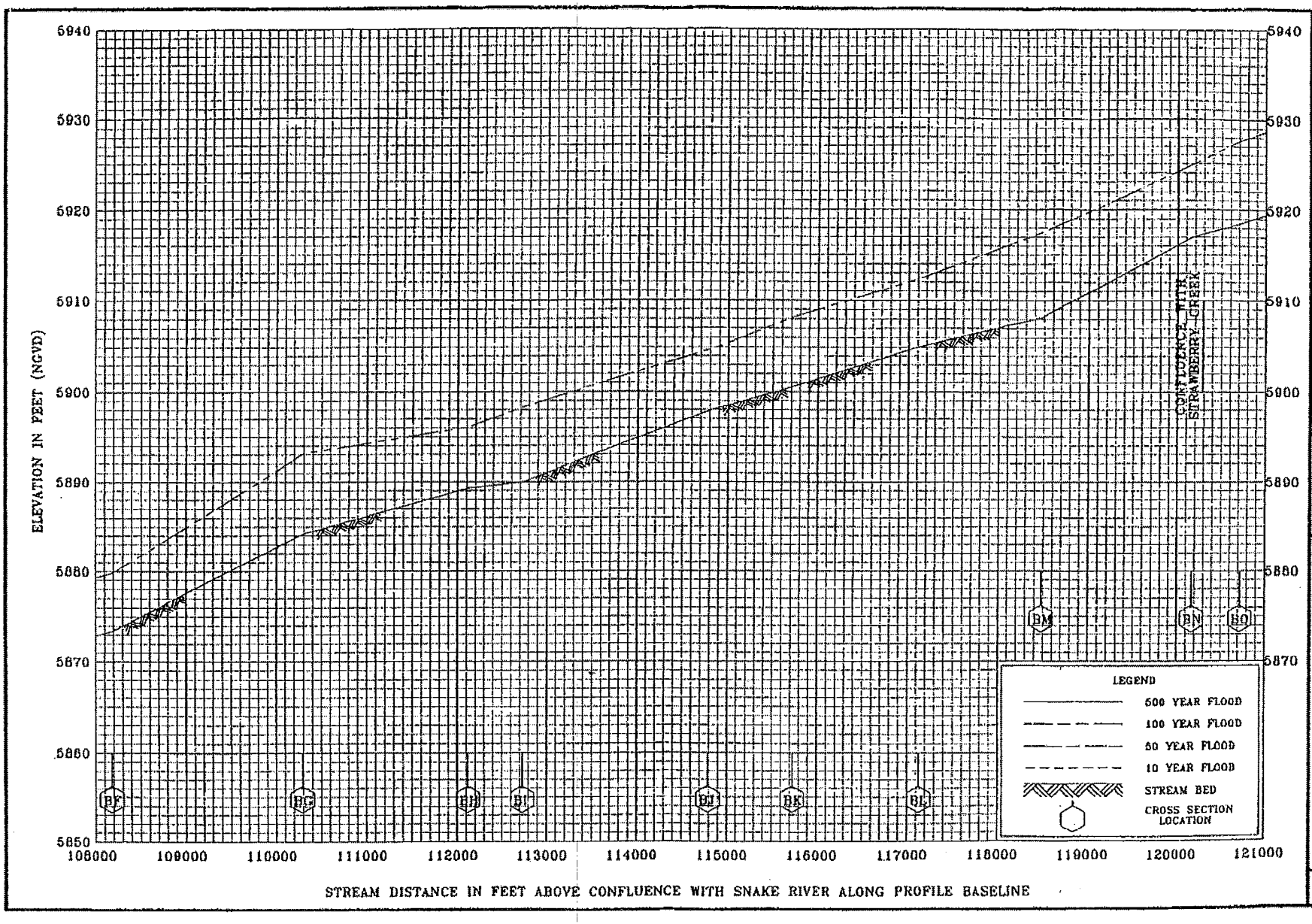
SALT RIVER

FEDERAL EMERGENCY MANAGEMENT AGENCY

LINCOLN COUNTY, WY

(UNINCORPORATED AREAS)

14P



FLOOD PROFILES

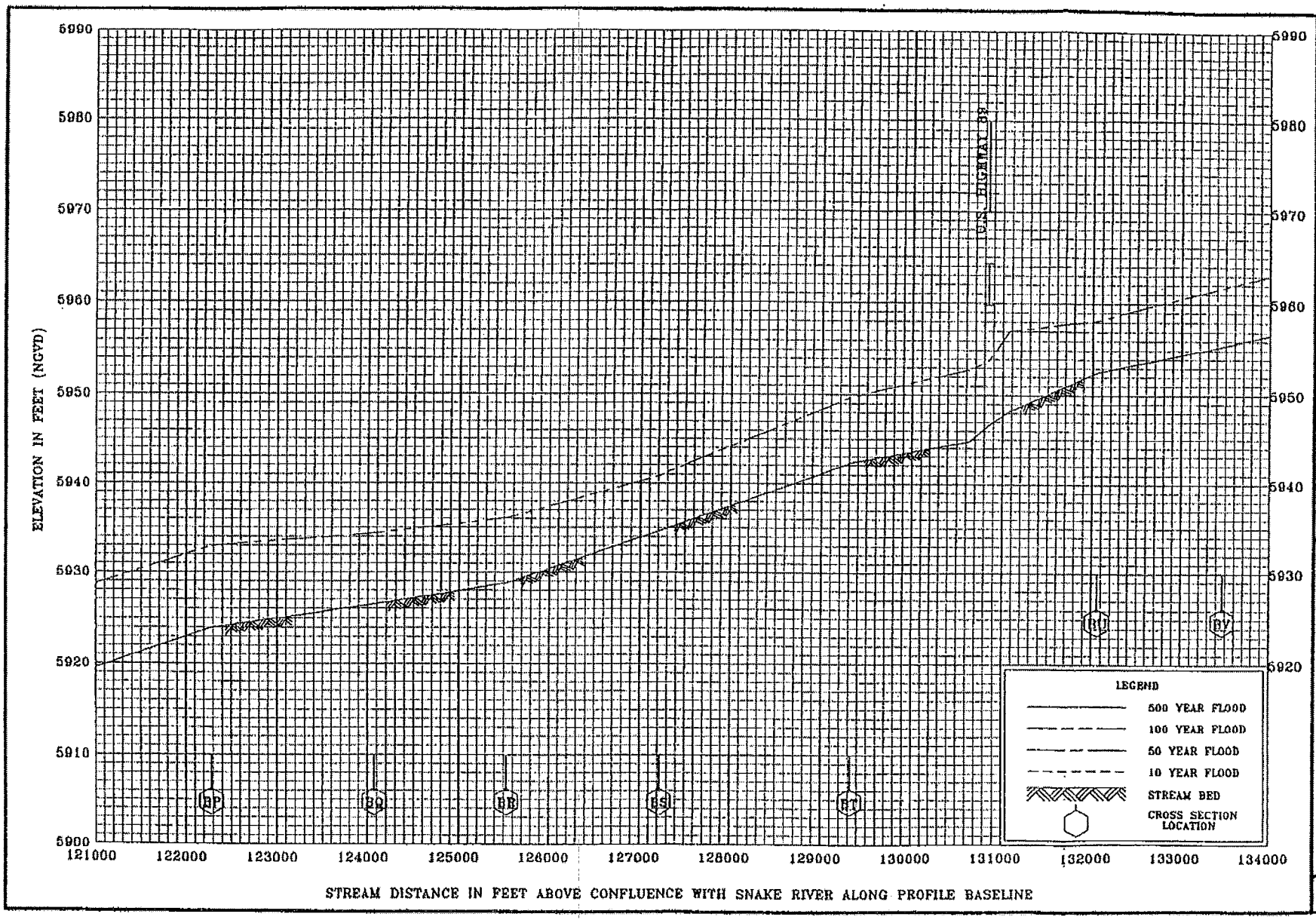
SALT RIVER

FEDERAL EMERGENCY MANAGEMENT AGENCY

LINCOLN COUNTY, WY

(UNINCORPORATED AREAS)

15P



FLOOD PROFILES

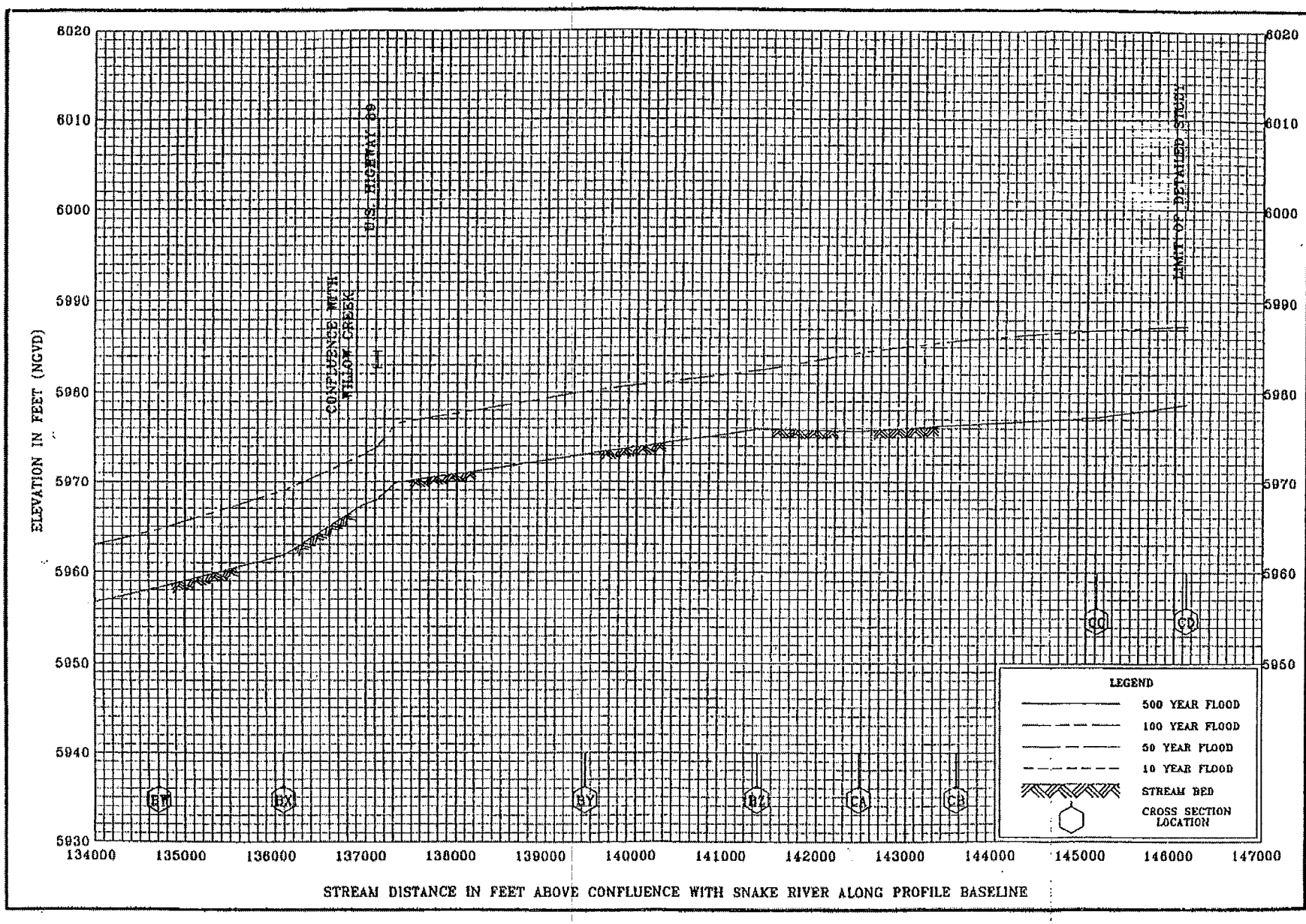
SALT RIVER

FEDERAL EMERGENCY MANAGEMENT AGENCY

LINCOLN COUNTY, WY

(UNINCORPORATED AREAS)

16P



FLOOD PROFILES

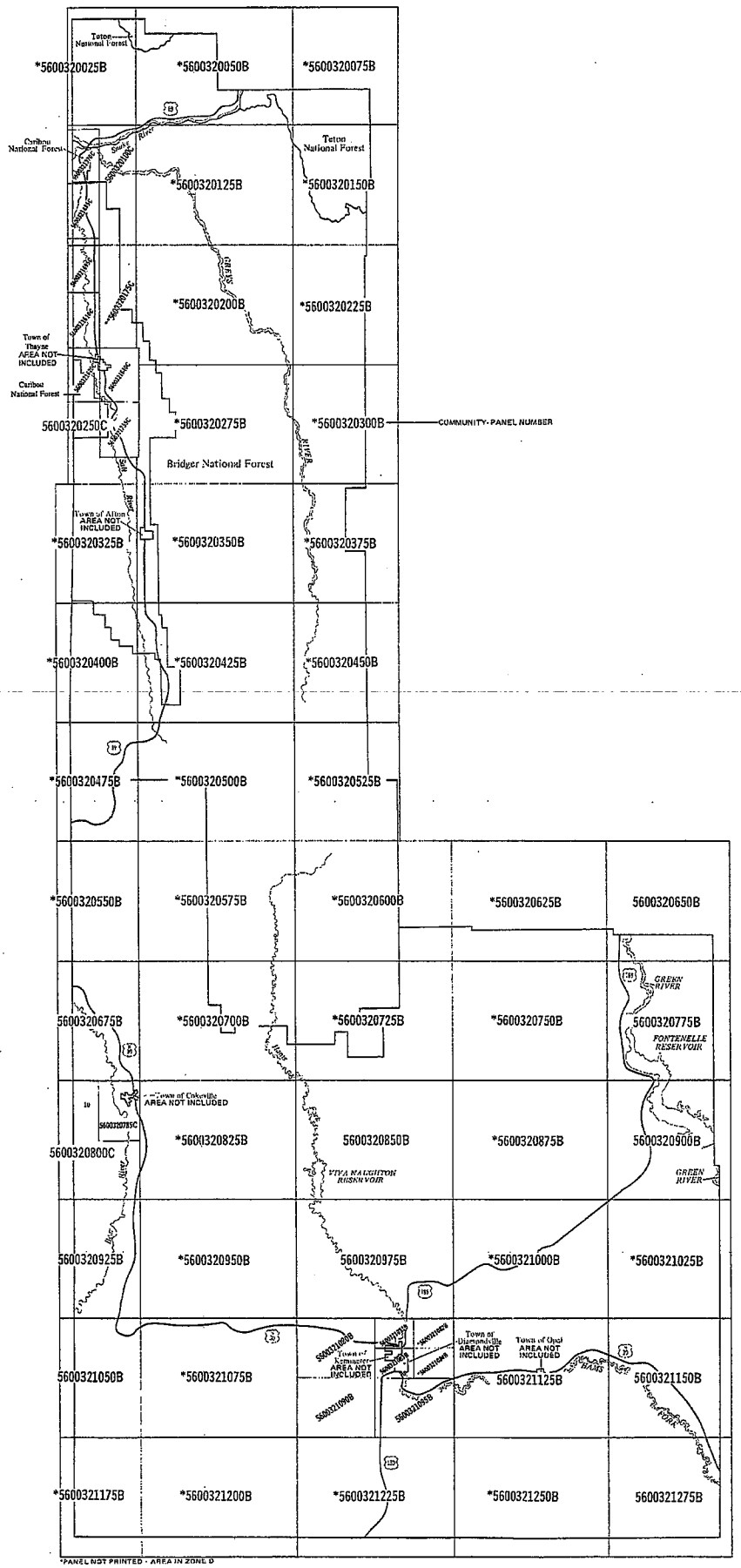
SALT RIVER

FEDERAL EMERGENCY MANAGEMENT AGENCY

LINCOLN COUNTY, WY

(UNINCORPORATED AREAS)

17P



*PANEL NOT PRINTED - AREA IN ZONE D

**PANEL NOT PRINTED-AREA IN ZONE X

MAP REPOSITORY

Lincoln County
Planning Department
520 Topaz Street
Kemmerer, Wyoming 83101
(Maps available for reference only, not for distribution.)

NATIONAL FLOOD INSURANCE PROGRAM

FIRM

FLOOD INSURANCE RATE MAP

LINCOLN COUNTY,
WYOMING
(UNINCORPORATED AREAS)

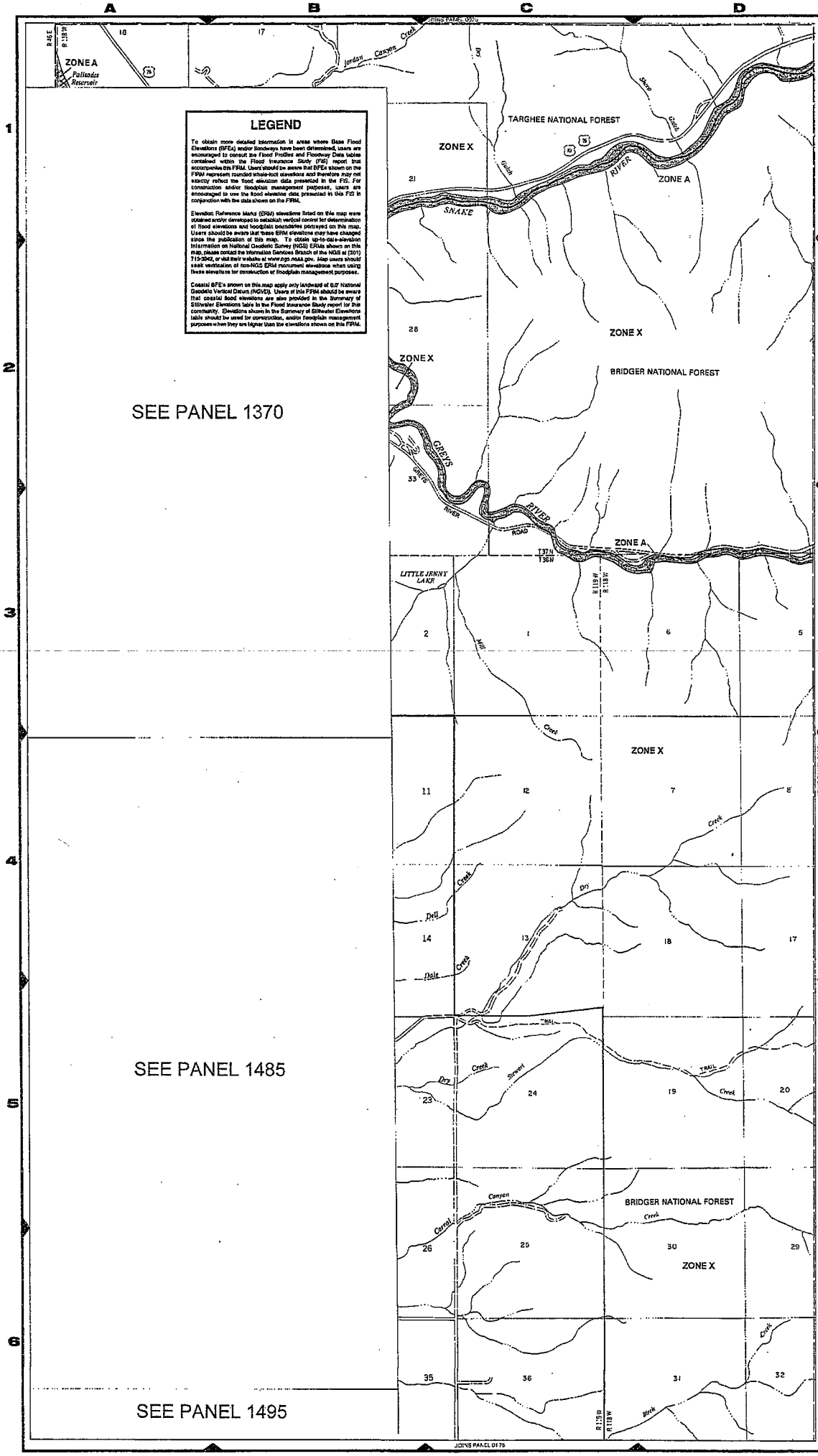
MAP INDEX

PANELS PRINTED: 100, 250, 650, 675, 775, 785, 800, 850, 900, 925, 975, 1050, 1080, 1081, 1083, 1090, 1095, 1125, 1150, 1275, 1370, 1485, 1495, 1610, 1620, 1640, 1755

COMMUNITY-PANEL NUMBER
560032INDOA

MAP REVISED:
JUNE 17, 2003

Federal Emergency Management Agency



LEGEND

To obtain more detailed information in areas where Base Flood Elevations (BFEs) and/or floodways have been determined, users are encouraged to consult the Flood Profiles and Floodway Data tables contained within the Flood Insurance Study (FIS) report that accompanies this FIRM. Users should be aware that BFEs shown on the FIRM represent rounded whole-foot elevations and therefore may not exactly reflect the flood elevation data presented in the FIS. For construction and/or floodplain management purposes, users are encouraged to use the flood elevation data presented in this FIS in conjunction with the data shown on the FIRM.

Elevation Reference Marks (ERM) elevations listed on this map were obtained and/or developed to establish vertical control for determination of flood elevations and floodplain boundaries portrayed on this map. Users should be aware that base ERM elevations may have changed since the publication of this map. To obtain up-to-date elevation information on National Geodetic Survey (NGS) ERMs shown on this map, please contact the Information Services Branch of the NGS at (301) 713-3242, or visit their website at www.ngs.noaa.gov. Map users should seek verification of non-NGS ERM monument elevations when using these elevations for construction or floodplain management purposes.

Coastal BFEs shown on this map apply only landward of 0.0' National Geodetic Vertical Datum (NGVD). Users of this FIRM should be aware that coastal flood elevations are also provided in the Summary of Stillwater Elevations table in the Flood Insurance Study report for this community. Elevations shown in the Summary of Stillwater Elevations table should be used for construction, and/or floodplain management purposes when they are higher than the elevations shown on this FIRM.

LEGEND

SPECIAL FLOOD HAZARD AREAS INUNDATED BY 100-YEAR FLOOD

- ZONE A — No base flood elevations determined.
- ZONE AE — Base flood elevations determined.
- ZONE AH — Flood depths of 1 to 3 feet (usually areas of ponding); base flood elevations determined.
- ZONE AO — Flood depths of 1 to 3 feet (usually sheet flow on sloping terrain); average depths determined. For areas of alluvial fan flooding, velocities also determined.
- ZONE A99 — To be protected from 100-year flood by Federal flood protection system under construction; no base flood elevations determined.
- ZONE V — Coastal flood with velocity hazard (wave action); no base flood elevations determined.
- ZONE VE — Coastal flood with velocity hazard (wave action); base flood elevations determined.

FLOODWAY AREAS IN ZONE AE

OTHER FLOOD AREAS

- ZONE X — Areas of 500-year flood; areas of 100-year flood with average depths of less than 1 foot or with drainage areas less than 1 square mile; and areas protected by levees from 100-year flood.

OTHER AREAS

- ZONE X — Areas determined to be outside 200-year floodplain.
- ZONE D — Areas in which flood hazards are undetermined.

UNDEVELOPED COASTAL BARRIERS†

Identified 1982 | Identified 1990 | Otherwise Protected Areas

†Coastal barrier areas are normally located within or adjacent to special flood hazard areas.

- Floodplain Boundary
- Floodway Boundary
- Zone D Boundary
- Boundary Dividing Special Flood Hazard Zones, and Boundary Dividing Areas of Different Coastal Base Flood Elevations Within Special Flood Hazard Zones.
- 513 — Base Flood Elevation Line; Elevation in Feet*
- (D)—(D) — Cross Section Line
- EL 9871 — Base Flood Elevation in Feet Where Uniform Within Zone*
- RM7$_X$ — Elevation Reference Mark
- •M1.5 — River Mile

*Referenced to the National Geodetic Vertical Datum of 1929

NOTES

This map is for use in administering the National Flood Insurance Program; it does not necessarily identify all areas subject to flooding, particularly from local drainage sources of small size, or all permanent features outside Special Flood Hazard Areas. The community map repository should be consulted for more detailed data on BFEs, and for any information on floodway delineations, prior to use of this map for property purchase or construction purposes.

Areas of Special Flood Hazard (100-year flood) include Zones A, AE, A1-A30, AH, AO, A99, V, VE and V1-V30.

Certain areas not in Special Flood Hazard Areas may be protected by flood control structures.

Boundaries of the floodways were computed at cross sections and interpolated between cross sections. The floodways were based on hydraulic considerations with regard to requirements of the Federal Emergency Management Agency.

Floodway widths in some areas may be too narrow to show to scale. Refer to Floodway Data Table where floodway width is shown at 1/20 inch.

Corporate limits shown are correct as of the date of this map. The user should contact appropriate community officials to determine if corporate limits have changed subsequent to the issuance of this map.

For adjoining panels, see separately printed Map Index.

MAP REPOSITORY
Lincoln County
Planning Department
520 Topaz Street
Kemmerer, Wyoming 82101
(Maps available for reference only, not for distribution)

INITIAL IDENTIFICATION:
JUNE 13, 1978

FLOOD HAZARD BOUNDARY MAP REVISION:

FLOOD INSURANCE RATE MAP EFFECTIVE:
FEBRUARY 16, 1990

FLOOD INSURANCE RATE MAP REVISIONS:
Map revised June 17, 2003 to add base flood elevations, to change special flood hazard areas, to change zone designations and to reflect updated topographic information.

To determine if flood insurance is available in this community, contact your insurance agent or call the National Flood Insurance Program at (800) 638-6620.

APPROXIMATE SCALE IN FEET
2000 0 2000

NATIONAL FLOOD INSURANCE PROGRAM

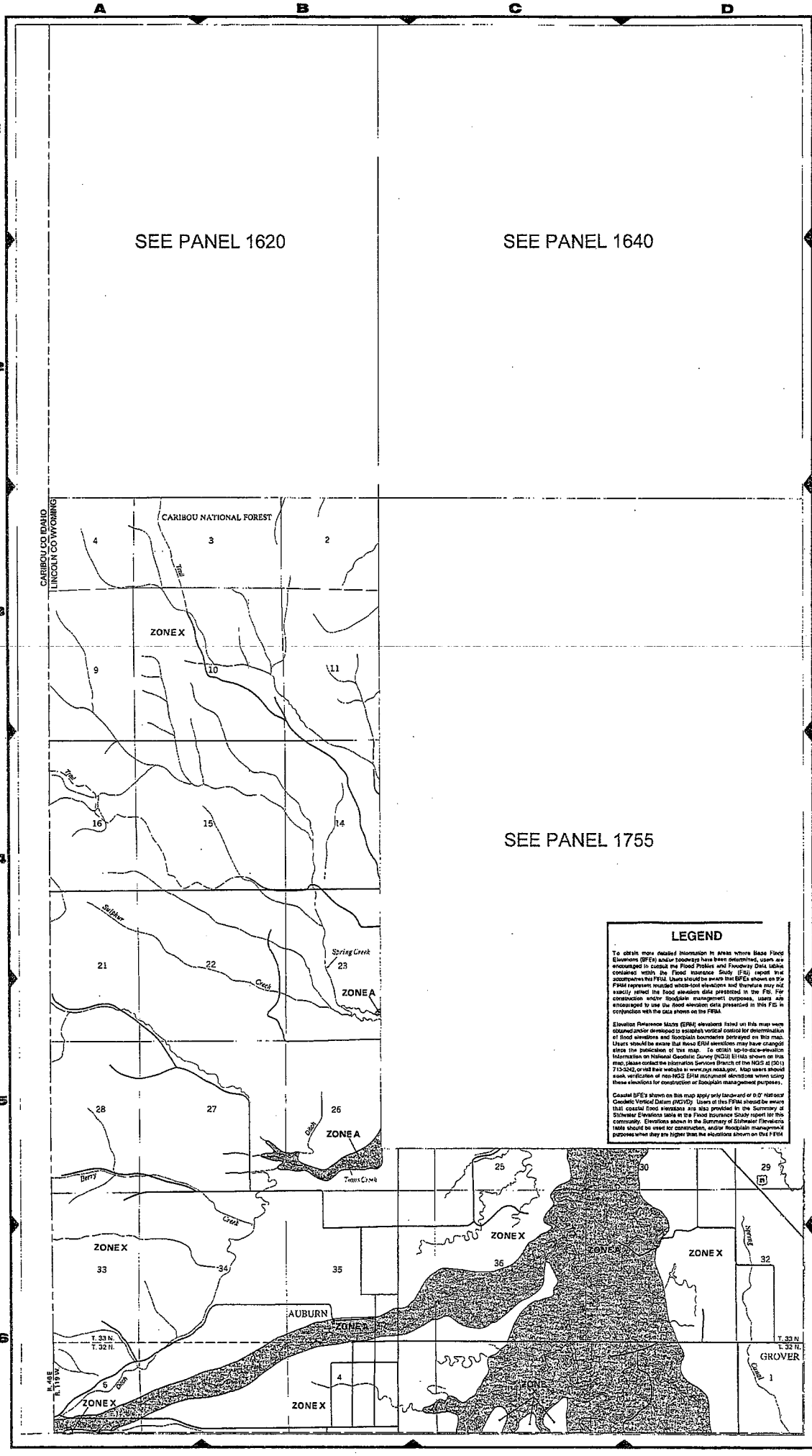
FIRM
FLOOD INSURANCE RATE MAP

LINCOLN COUNTY, WYOMING
(UNINCORPORATED AREAS)

PANEL 100 OF 3800
(SEE MAP INDEX FOR PANELS NOT PRINTED)

COMMUNITY-PANEL NUMBER
560032 0100 C
MAP REVISED:
JUNE 17, 2003

Federal Emergency Management Agency



LEGEND

SPECIAL FLOOD HAZARD AREAS INUNDATED BY 100-YEAR FLOOD

- ZONE A — No base flood elevations determined.
- ZONE AE — Base flood elevations determined.
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- ZONE A99 — To be protected from 100-year flood by Federal flood protection system under construction; no base flood elevations determined.
- ZONE V — Coastal flood with velocity hazard (wave action); no base flood elevations determined.
- ZONE VE — Coastal flood with velocity hazard (wave action); base flood elevations determined.

FLOODWAY AREAS IN ZONE AE

OTHER FLOOD AREAS

- ZONE X — Areas of 500-year flood; areas of 100-year flood with average depths of less than 1 foot or with drainage areas less than 1 square mile; and areas protected by levees from 100-year flood.

OTHER AREAS

- ZONE X — Areas determined to be outside 500-year flood plain.
- ZONE D — Areas in which flood hazards are undetermined.

UNDEVELOPED COASTAL BARRIERS

Identified 1983 | Identified 1990 | Otherwise Protected Areas

(Coastal barrier areas are normally located within or adjacent to special flood hazard areas.)

Floodplain Boundary

Floodway Boundary

Zone D Boundary

Boundary Dividing Special Flood Hazard Zones, and Boundary Dividing Areas of Different Coastal Base Flood Elevations Within Special Flood Hazard Zones.

513 — Base Flood Elevation Line; Elevation in Feet*

D — Cross Section Line

(EL 987) — Base Flood Elevation in Feet Where Uniform Within Zone*

RM7x — Elevation Reference Mark

•M1.5 — River Mile

*Referenced to the National Geodetic Vertical Datum of 1929

NOTES

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For adjoining panels, see separately printed Map Index.

MAP REPOSITORY
Lincoln County
Planning Department
520 Topaz Street
Kemmerer, Wyoming 83101
(Maps available for reference only, not for distribution.)

INITIAL IDENTIFICATION:
JUNE 13, 1978

FLOOD HAZARD BOUNDARY MAP REVISION:

FLOOD INSURANCE RATE MAP EFFECTIVE:
FEBRUARY 15, 1980

FLOOD INSURANCE RATE MAP REVISIONS:
Map revised June 17, 2003 to add base flood elevations, to change special flood hazard areas, to change zone designations and to reflect updated topographic information.

To determine if flood insurance is available in this community, contact your insurance agent or call the National Flood Insurance Program at (800) 638-6620.

APPROXIMATE SCALE IN FEET
2000 0 2000

LEGEND

To obtain more detailed information in areas where Base Flood Elevations (BFEs) and/or floodways have been determined, users are encouraged to consult the Flood Profiles and Floodway Data tables contained within the Flood Insurance Study (FIS) report that accompanies this FIRM. Users should be aware that BFEs shown on the FIRM represent rounded whole-foot elevations and therefore may not exactly reflect the flood elevation data presented in the FIS. For construction and/or floodplain management purposes, users are encouraged to use the flood elevation data presented in this FIS in conjunction with the data shown on the FIRM.

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NATIONAL FLOOD INSURANCE PROGRAM

FIRM
FLOOD INSURANCE RATE MAP

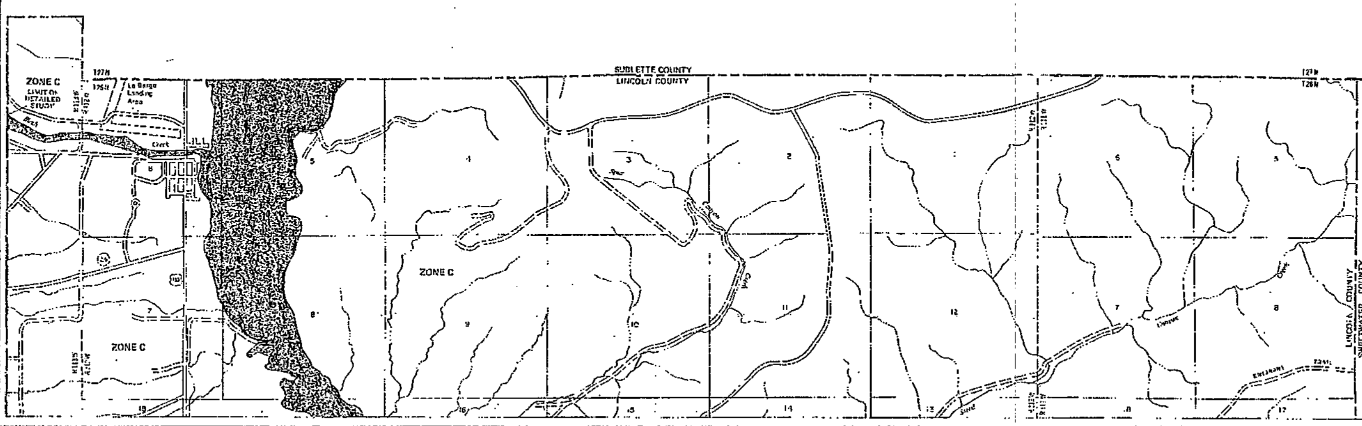
LINCOLN COUNTY
WYOMING,
(UNINCORPORATED AREAS)

PANEL 250 OF 3800
(SEE MAP INDEX FOR PANELS NOT PRINTED)

COMMUNITY-PANEL NUMBER
560032 0250 C

MAP REVISED:
JUNE 17, 2003

Federal Emergency Management Agency



KEY TO MAP

500-Year Flood Boundary
100-Year Flood Boundary
Zone Designations* With Date of Identification e.g., 12/2/74
100-Year Flood Boundary
500-Year Flood Boundary

Base Flood Elevation Line With Elevation In Feet** — 513 —

Base Flood Elevation In Feet Where Uniform Within Zone** (EL 987)

Elevation Reference Mark RM7

River Mile • M1.5

**Referenced to the National Geodetic Vertical Datum of 1929

*EXPLANATION OF ZONE DESIGNATIONS

ZONE	EXPLANATION
A	Areas of 100-year flood; base flood elevations and flood hazard factors not determined.
AO	Areas of 100-year shallow flooding where depths are between one (1) and three (3) feet; average depths of inundation are shown, but no flood hazard factors are determined.
AH	Areas of 100-year shallow flooding where depths are between one (1) and three (3) feet; base flood elevations are shown, but no flood hazard factors are determined.
A1-A30	Areas of 100-year flood; base flood elevations and flood hazard factors determined.
A99	Areas of 100-year flood to be protected by flood protection system under construction; base flood elevations and flood hazard factors not determined.
B	Areas between limits of the 100-year flood and 500-year flood; or certain areas subject to 100-year flooding with average depths less than one (1) foot or where the contributing drainage area is less than one square mile; or areas protected by levees from the base flood. (Medium shading)
C	Areas of minimal flooding. (No shading)
D	Areas of undetermined, but possible, flood hazards.
V	Areas of 100-year coastal flood with velocity (wave action); base flood elevations and flood hazard factors not determined.
V1-V30	Areas of 100-year coastal flood with velocity (wave action); base flood elevations and flood hazard factors determined.

NOTES TO USER

Certain areas not in the special flood hazard areas (zones A and V) may be protected by flood control structures.

This map is for flood insurance purposes only; it does not necessarily show all areas subject to flooding in the community or all planimetric features outside special flood hazard areas.

For adjoining map panels, see separately printed Index To Map Panels.

INITIAL IDENTIFICATION:
JUNE 13, 1978

FLOOD HAZARD BOUNDARY MAP REVISIONS:

FLOOD INSURANCE RATE MAP EFFECTIVE:
FEBRUARY 15, 1980

FLOOD INSURANCE RATE MAP REVISIONS:

Refer to the FLOOD INSURANCE RATE MAP EFFECTIVE date shown on this map to determine when actuarial rates apply to structures in the zones where elevations or depths have been established.

To determine if flood insurance is available in this community, contact your insurance agent, or call the National Flood Insurance Program at (800) 638-6620 or (800) 424-8872.

APPROXIMATE SCALE

2000 0 2000 FEET

NATIONAL FLOOD INSURANCE PROGRAM

FIRM
FLOOD INSURANCE RATE MAP

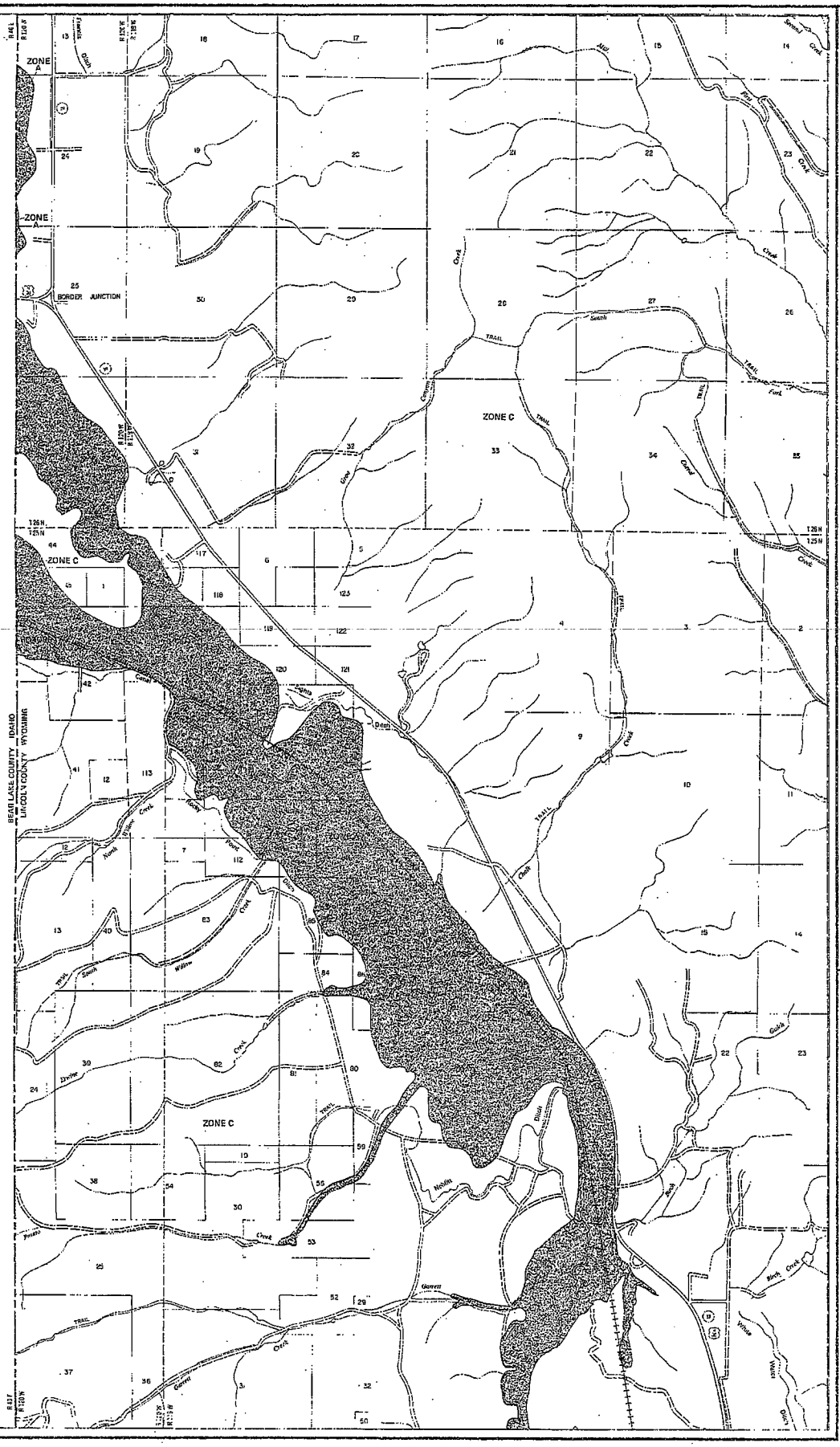
LINCOLN COUNTY, WYOMING
(UNINCORPORATED AREAS)

PANEL 650 OF 1275
(SEE MAP INDEX FOR PANELS NOT PRINTED)

COMMUNITY-PANEL NUMBER
560032 0650 B

EFFECTIVE DATE:
FEBRUARY 15, 1980

U.S. DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT
FEDERAL INSURANCE ADMINISTRATION



KEY TO MAP

500-Year Flood Boundary

100-Year Flood Boundary

Zone Designations* With Date of Identification (e.g., 12/2/74)

100-Year Flood Boundary

500-Year Flood Boundary

ZONE B
ZONE C
ZONE D
ZONE E
ZONE F

Base Flood Elevation Line With Elevation In Feet**

513

Base Flood Elevation In Feet Where Uniform Within Zone**

(EL 987)

Elevation Reference Mark

RM7 ×

River Mile

• M1.5

**Referenced to the National Geodetic Vertical Datum of 1929

*EXPLANATION OF ZONE DESIGNATIONS

ZONE	EXPLANATION
A	Areas of 100-year flood; base flood elevations and flood hazard factors not determined.
AO	Areas of 100-year shallow flooding where depths are between one (1) and three (3) feet; average depths of inundation are shown, but no flood hazard factors are determined.
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B	Areas between limits of the 100-year flood and 500-year flood; or certain areas subject to 100-year flooding with average depths less than one (1) foot or where the contributing drainage area is less than one square mile; or areas protected by levees from the base flood. (Medium shading)
C	Areas of minimal flooding. (No shading)
D	Areas of undetermined, but possible, flood hazards.
V	Areas of 100-year coastal flood with velocity (wave action); base flood elevations and flood hazard factors not determined.
V1-V30	Areas of 100-year coastal flood with velocity (wave action); base flood elevations and flood hazard factors determined.

NOTES TO USER

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This map is for flood insurance purposes only; it does not necessarily show all areas subject to flooding in the community or all planimetric features outside special flood hazard areas.

For additional map panels, see separate printed Index To Map Panels.

INITIAL IDENTIFICATION:
JUNE 12, 1970

FLOOD HAZARD BOUNDARY MAP REVISIONS:

FLOOD INSURANCE RATE MAP EFFECTIVE:
FEBRUARY 15, 1980

FLOOD INSURANCE RATE MAP REVISIONS:

Refer to the FLOOD INSURANCE RATE MAP EFFECTIVE date shown on this map to determine when actuarial rates apply to structures in the zones where elevations or depths have been established.

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APPROXIMATE SCALE
2000 0 2000 FEET

NATIONAL FLOOD INSURANCE PROGRAM

FIRM
FLOOD INSURANCE RATE MAP

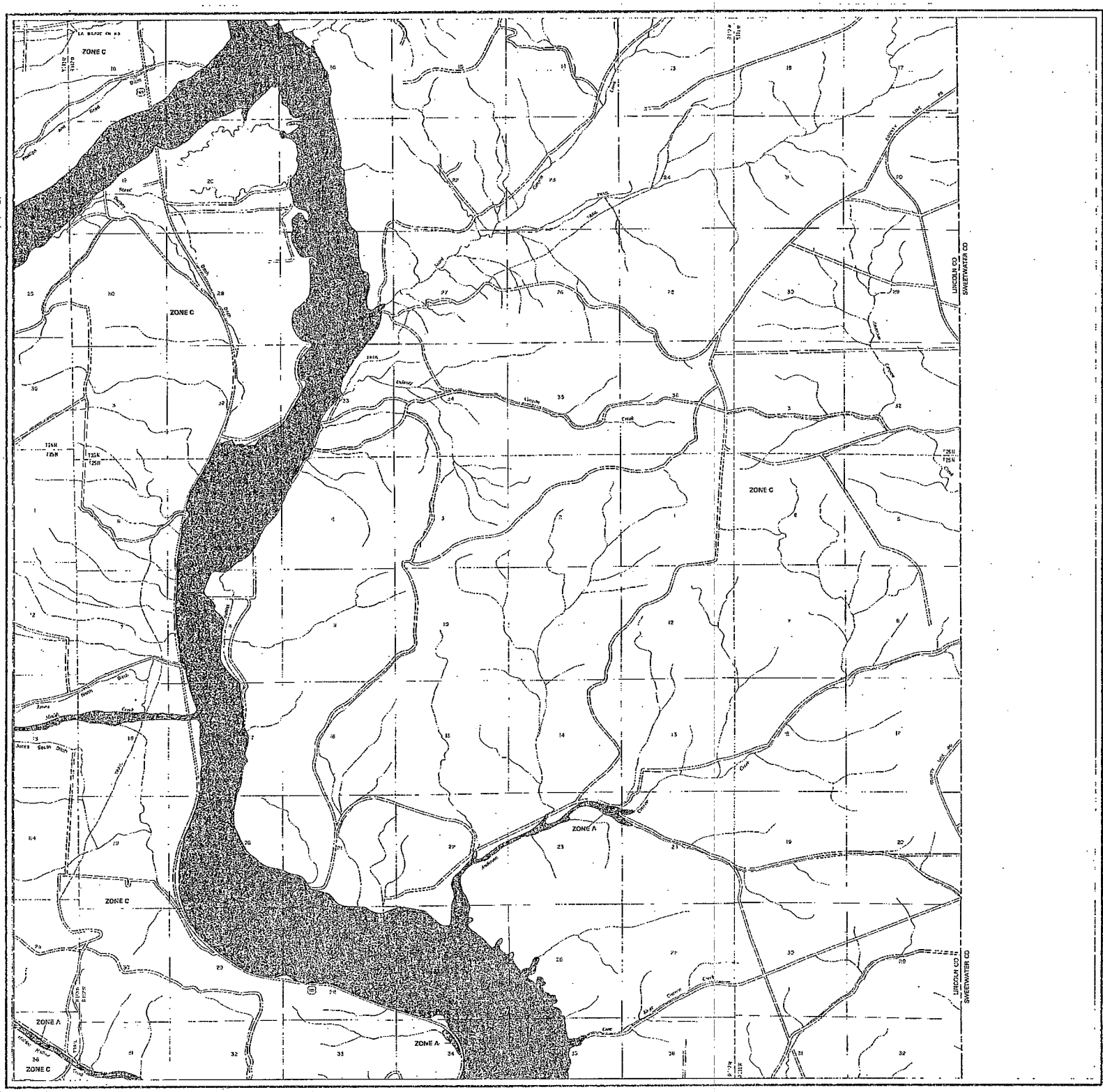
LINCOLN COUNTY, WYOMING
(UNINCORPORATED AREAS)

PANEL 675 OF 1275
(SEE MAP INDEX FOR PANELS NOT PRINTED)

COMMUNITY-PANEL NUMBER
560032 0675 B

EFFECTIVE DATE:
FEBRUARY 15, 1980

U.S. DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT
FEDERAL INSURANCE ADMINISTRATION



KEY TO MAP

100-Year Flood Boundary
500-Year Flood Boundary
Zone Designations* With Date of Identification e.g., 1/21/78
100-Year Flood Boundary
500-Year Flood Boundary
Base Flood Elevation Line With Elevation in Feet**
Base Flood Elevation in Feet Where Uniform Within Zone**
Elevation Reference Mark
River Mile

* Referenced to the National Geodetic Vertical Datum of 1929

*EXPLANATION OF ZONE DESIGNATIONS

ZONE	EXPLANATION
A	Areas of 100-year flood; base flood elevations and flood hazard factors not determined.
AE	Areas of 100-year shallow flooding where depths are between one (1) and three (3) feet; base flood elevations are shown, but no flood hazard factors are determined.
AH	Areas of 100-year shallow flooding where depths are between one (1) and three (3) feet; average flood elevations are shown, but no flood hazard factors are determined.
A1-A30	Areas of 100-year flood; base flood elevations and flood hazard factors determined.
A99	Areas of 100-year flood to be protected by flood protection system under construction; base flood elevations and flood hazard factors not determined.
B	Areas between limits of the 100-year flood and 500-year flood; or certain areas subject to 100-year flooding with average depths less than one (1) foot or where the contributing drainage area is less than one square mile; or areas protected by levees from the base flood. (Medium shading)
C	Areas of minimal flooding. (No shading)
D	Areas of undetermined, but possible, flood hazards.
V	Areas of 100-year coastal flood with velocity (wave action); base flood elevations and flood hazard factors not determined.
V1-V30	Areas of 100-year coastal flood with velocity (wave action); base flood elevations and flood hazard factors determined.

*NOTES TO USER

In this area, refer to the special flood hazard zones (zones A and V) that may be presented by flood control structures.

This map is for flood insurance purposes only; it does not necessarily show all areas subject to flooding, or the relationship of all planimetric features to special flood hazard areas.

For adjoining map panels, see separately printed index. by Map Panels.

INITIAL IDENTIFICATION:
JUNE 12, 1978

FLOOD HAZARD BOUNDARY MAP REVISIONS:

FLOOD INSURANCE RATE MAP EFFECTIVE:
FEBRUARY 15, 1980

FLOOD INSURANCE RATE MAP REVISIONS:

Refer to the FLOOD INSURANCE RATE MAP EFFECTIVE date listed on this map to determine when actuarial rates apply to structures in the zones where elevations or depths have been established.

To determine if flood insurance is available in this community, contact your insurance agent or call the National Flood Insurance Program, at (800) 638-6620, or (800) 424-8872.

APPROXIMATE SCALE
2000 0 2000 FEET

NATIONAL FLOOD INSURANCE PROGRAM

FIRM
FLOOD INSURANCE RATE MAP

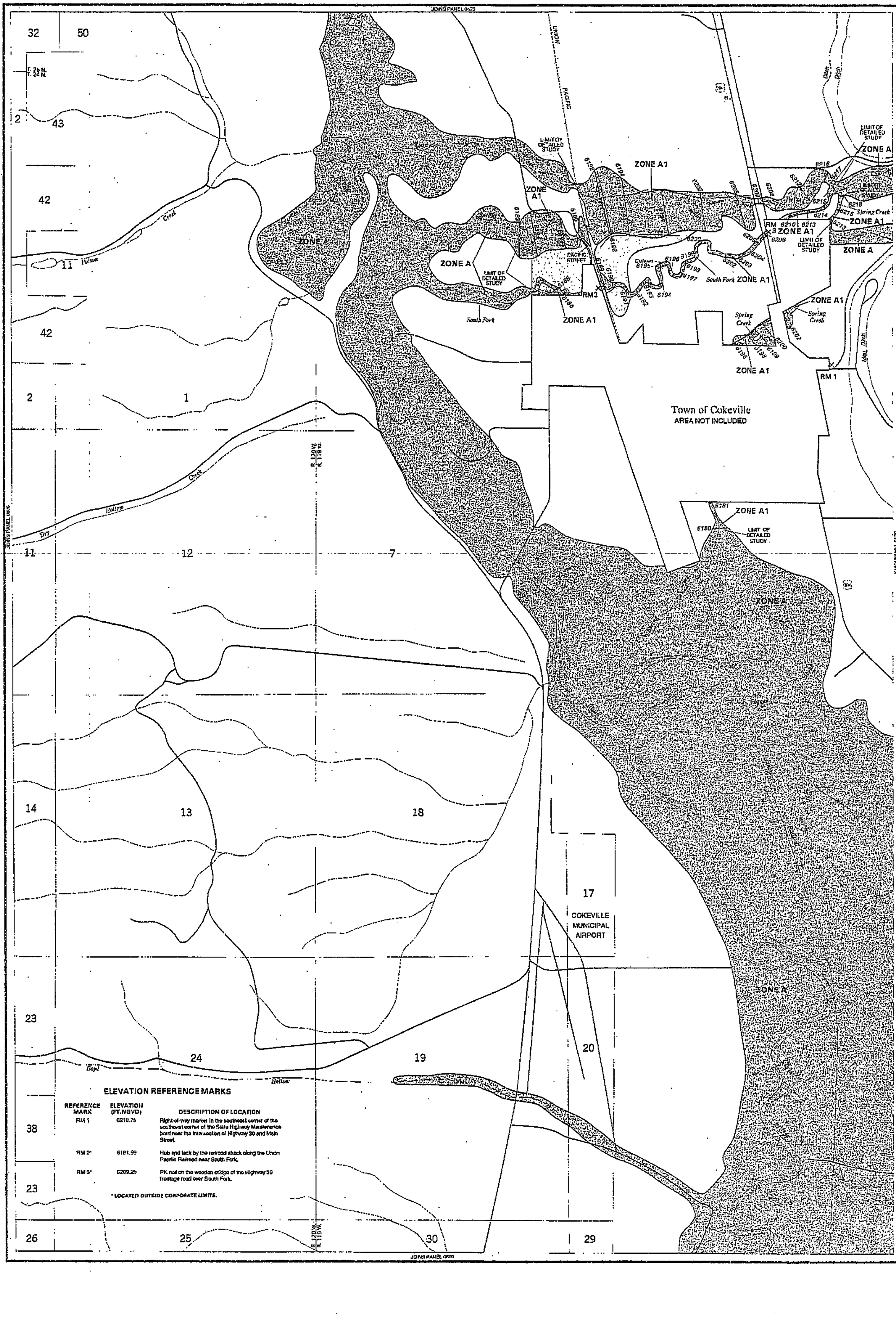
LINCOLN COUNTY, WYOMING
(UNINCORPORATED AREAS)

PANEL 775 OF 1275
(SEE MAP INDEX FOR PANELS NOT PRINTED)

COMMUNITY-PANEL NUMBER
560032 0775 B

EFFECTIVE DATE:
FEBRUARY 15, 1980

U.S. DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT
FEDERAL INSURANCE ADMINISTRATION



ELEVATION REFERENCE MARKS

REFERENCE MARK	ELEVATION (FT. NGVD)	DESCRIPTION OF LOCATION
RM 1	6210.75	Right-of-way marker in the southeast corner of the southeast corner of the State Highway Maintenance barn near the intersection of Highway 30 and Main Street.
RM 2*	6191.99	Hub and tack by the railroad shack along the Union Pacific Railroad near South Fork.
RM 3*	6209.25	PK nail on the wooden bridge of the Highway 30 frontage road over South Fork.

* LOCATED OUTSIDE CORPORATE LIMITS.

KEY TO MAP

500-Year Flood Boundary	ZONE B
100-Year Flood Boundary	
Zone Designations*	ZONE A1 / ZONE A5
100-Year Flood Boundary	ZONE B
500-Year Flood Boundary	
Base Flood Elevation Line With Elevation In Feet**	513
Base Flood Elevation in Feet Where Uniform Within Zone**	(EL 987)
Elevation Reference Mark	RM7x
Zone D Boundary	
River Mile	•M1.5
Approximate 100-Year Flood Boundary	ZONE A

**Referenced to the National Geodetic Vertical Datum of 1929

UNDEVELOPED COASTAL BARRIERS†

Identified 1983 — Identified 1990 — Otherwise Protected Areas

† Coastal barrier areas are normally located within or adjacent to special flood hazard areas.

*EXPLANATION OF ZONE DESIGNATIONS

ZONE	EXPLANATION
A	Areas of 100-year flood; base flood elevations and flood hazard factors not determined.
AO	Areas of 100-year shallow flooding where depths are between one (1) and three (3) feet; average depths of inundation are shown, but no flood hazard factors are determined.
AH	Areas of 100-year shallow flooding where depths are between one (1) and three (3) feet; base flood elevations are shown, but no flood hazard factors are determined.
A1-A30	Areas of 100-year flood; base flood elevations and flood hazard factors determined.
A99	Areas of 100-year flood to be protected by flood protection system under construction; base flood elevations and flood hazard factors not determined.
B	Areas between limits of the 100-year flood and 500-year flood; or certain areas subject to 100-year flooding with average depths less than one (1) foot or where the contributing drainage area is less than one square mile; or areas protected by levees from the base flood. (Medium shading)
C	Areas of minimal flooding. (No shading)
D	Areas of undetermined, but possible, flood hazards.
V	Areas of 100-year coastal flood with velocity (wave action); base flood elevations and flood hazard factors not determined.
V1-V30	Areas of 100-year coastal flood with velocity (wave action); base flood elevations and flood hazard factors determined.

NOTES TO USER

This map is for use in administering the National Flood Insurance Program. It does not necessarily identify all areas subject to flooding, particularly from local drainage sources of small size, or all planimetric features outside Special Flood Hazard Areas. The community map repository should be consulted for more detailed data on BFEs, and for any information on floodway delineations, prior to use of this map for property purchase or construction purposes.

Areas of special flood hazard (100-year flood) include Zones A, A1-30, AE, AH, AO, A99, V, V1-30 and VE.

Certain areas not in Special Flood Hazard Areas may be protected by flood control structures.

Coastal base flood elevations apply only landward of 0.0 NGVD, and include the effects of wave action; these elevations may also differ significantly from those developed by the National Weather Service for hurricane evacuation planning.

Corporate limits shown are current as of the date of this map. The user should contact appropriate community officials to determine if corporate limits have changed subsequent to the issuance of this map.

For adjoining map panels see separately printed Map Index.

INITIAL IDENTIFICATION:
JUNE 13, 1978

FLOOD HAZARD BOUNDARY MAP REVISION:

FLOOD INSURANCE RATE MAP EFFECTIVE:
FEBRUARY 15, 1980

FLOOD INSURANCE RATE MAP REVISIONS:

Map revised September 21, 1998 to update corporate limits, to add base flood elevations, and to add roads and road names.

To determine if flood insurance is available in this community, contact your Insurance agent, or call the National Flood Insurance Program, at (800) 638-6620.

APPROXIMATE SCALE IN FEET

1000 0 1000

NATIONAL FLOOD INSURANCE PROGRAM

FIRM
FLOOD INSURANCE RATE MAP

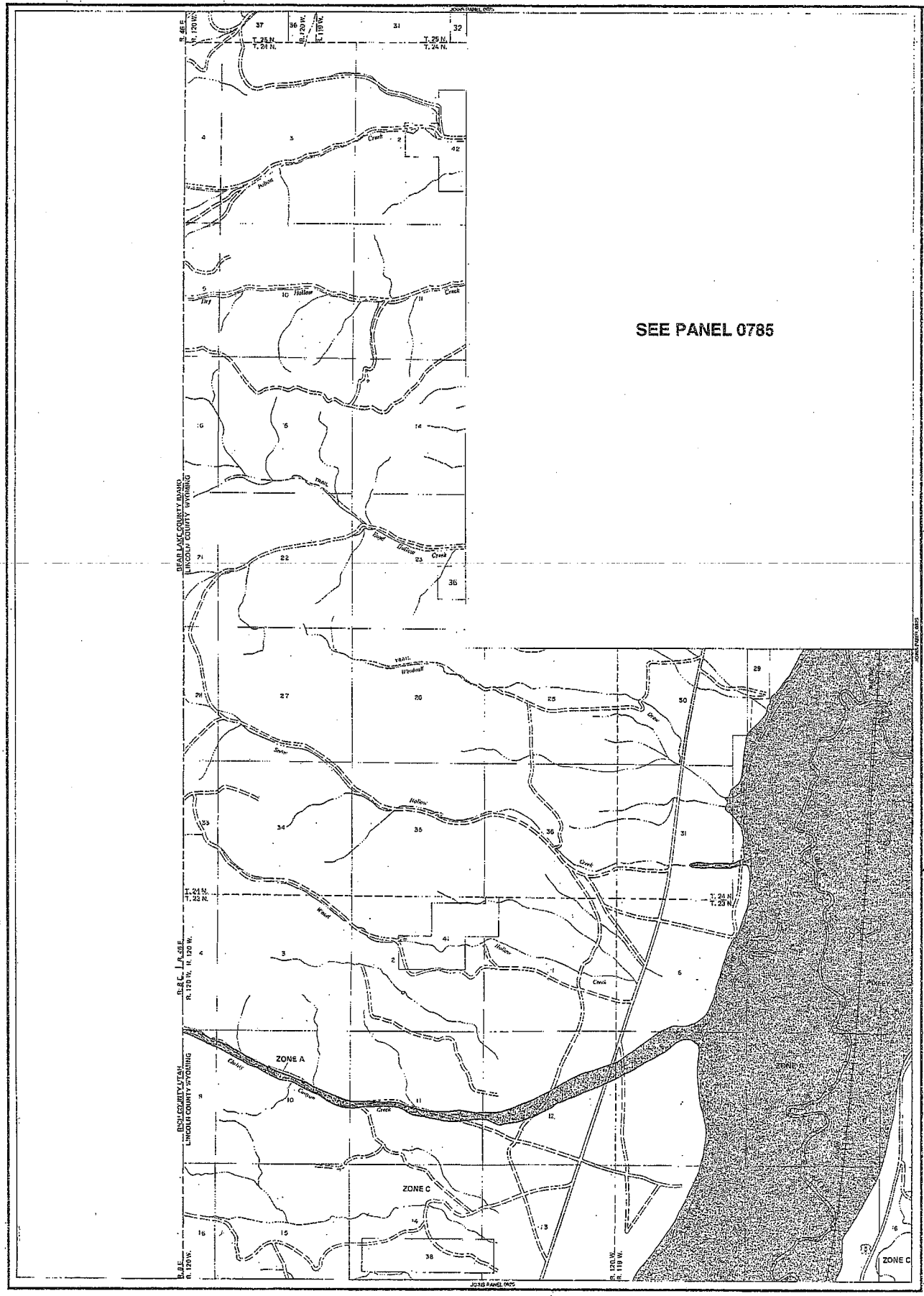
LINCOLN COUNTY, WYOMING
(UNINCORPORATED AREAS)

PANEL 785 OF 1275
(SEE MAP INDEX FOR PANELS NOT PRINTED)

COMMUNITY-PANEL NUMBER
560032 0785 C

MAP REVISED:
SEPTEMBER 21, 1998

Federal Emergency Management Agency



KEY TO MAP

500-Year Flood Boundary
100-Year Flood Boundary
Zone Designations*
1%-Year Flood Boundary
0.2%-Year Flood Boundary
Base Flood Elevation Line With Elevation In Feet**
Base Flood Elevation in Feet Where Uniform Within Zone**
Elevation Reference Mark
Zone D Boundary
River Mile
Approximate 100-Year Flood Boundary

ZONE B
ZONE B/C
ZONE B
513
(EL 987)
RM7x
M1.5
ZONE A

**Reference to the National Geodetic Vertical Datum of 1929

UNDEVELOPED COASTAL BARRIERS*

Coastal Barrier Unit
Identified Only
Otherwise Protected Areas

*Coastal barrier areas are normally located within or adjacent to special flood hazard areas.

*EXPLANATION OF ZONE DESIGNATIONS

ZONE	EXPLANATION
A	Areas of 100-year flood; base flood elevations and flood hazard factors not determined.
AO	Areas of 100-year shallow flooding where depths are between one (1) and three (3) feet; average depths of the inundation are shown, but no flood hazard factors are determined.
AH	Areas of 100-year shallow flooding where depths are between one (1) and three (3) feet; base flood elevations are shown, but no flood hazard factors are determined.
A1-A30	Areas of 100-year flood; base flood elevations and flood hazard factors determined.
A99	Areas of 100-year flood to be protected by flood protection system under construction; base flood elevations and flood hazard factors not determined.
B	Areas between limits of the 100-year flood and 500-year flood; or certain areas subject to 100-year flooding with average depths less than one (1) foot or where the contributing drainage area is less than one square mile; or areas protected by levees from the base flood. (Medium shading)
C	Areas of minimal flooding. (No shading)
D	Areas of undetermined, but possible, flood hazards.
V	Areas of 100-year coastal flood with velocity (wave action); base flood elevations and flood hazard factors not determined.
V1-V30	Areas of 100-year coastal flood with velocity (wave action); base flood elevations and flood hazard factors determined.

NOTES TO USER

This map is for use in administering the National Flood Insurance Program. It does not necessarily identify all areas subject to flooding, particularly from local drainage sources of small size, or all ponding conditions outside Special Flood Hazard Areas. The community map repository should be consulted for possible updated data on FIRMs, and for any information on floodway delineations, prior to use of this map for property purchase or construction purposes.

Areas of special flood hazard (100-year flood) include Zones A, A1-30, AH, AE, AO, AR, V, V1-30 and VE.

Certain areas not in Special Flood Hazard Areas may be protected by flood control structures.

Coastal base flood elevations apply only landward of 0.0 (NGVD), and include the effects of wave action; these elevations may also differ significantly from those developed by the National Weather Service for hurricane evacuation planning.

Corporate limits shown are current as of the date of this map. The user should contact appropriate community officials to determine if corporate limits have changed subsequent to the issuance of this map.

For adjoining map panels, see separately printed map index.

INITIAL IDENTIFICATION:
JUNE 15, 1978

FLOOD HAZARD BOUNDARY MAP REVISION:

FLOOD INSURANCE RATE MAP EFFECTIVE:
FEBRUARY 15, 1980

FLOOD INSURANCE RATE MAP REVISIONS:

Map revised September 21, 1998 to update corporate limits, to add base flood elevations, and to add roads and road names.

To determine if flood insurance is available in this community, contact your insurance agent, or call the National Flood Insurance Program, at (800) 638-6620.

APPROXIMATE SCALE IN FEET
2000 0 2000

NATIONAL FLOOD INSURANCE PROGRAM

FIRM
FLOOD INSURANCE RATE MAP

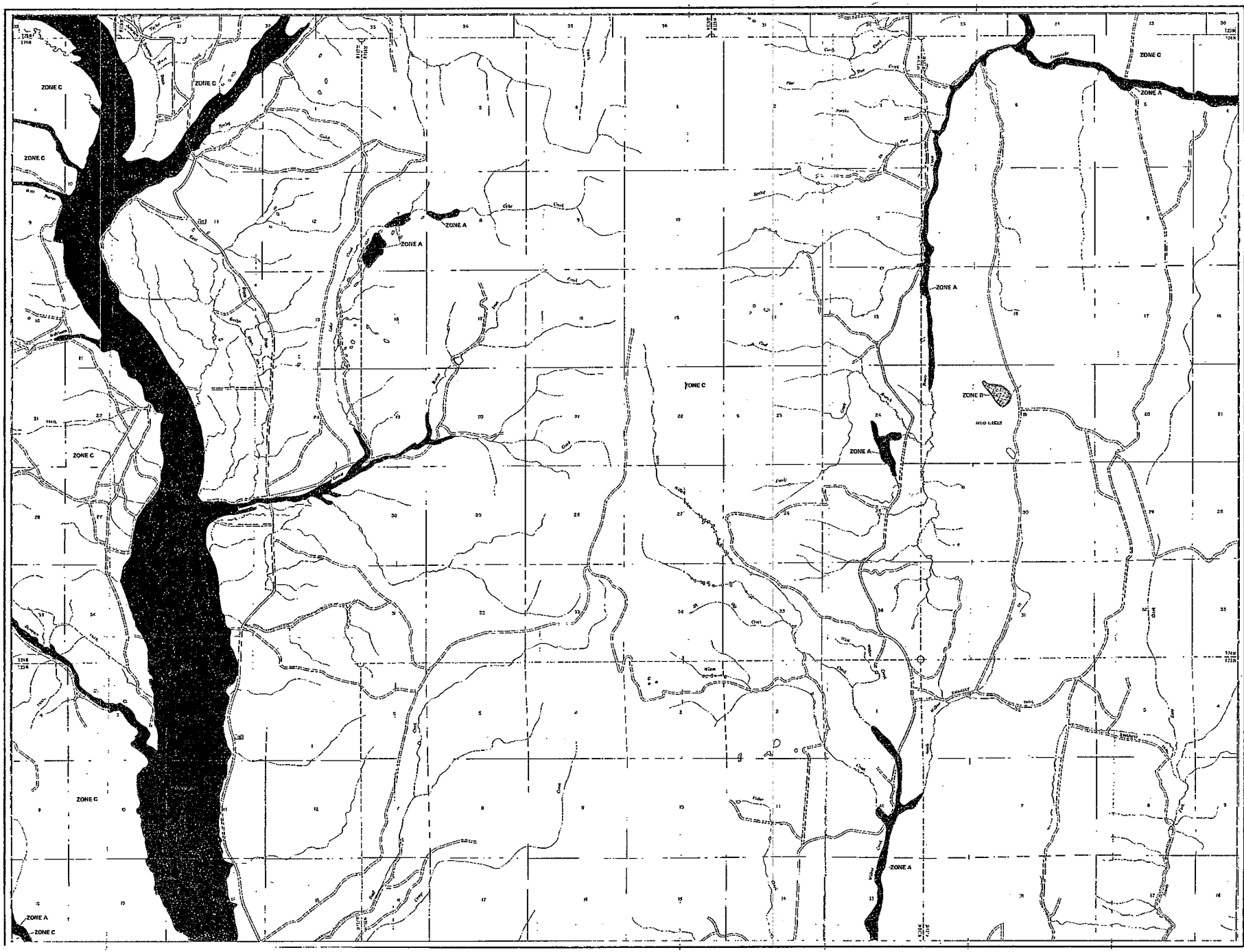
LINCOLN COUNTY, WYOMING
(UNINCORPORATED AREAS)

PANEL 800 OF 1275
(SEE MAP INDEX FOR PANELS NOT PRINTED)

COMMUNITY-PANEL NUMBER
560032 0800 C

MAP REVISED:
SEPTEMBER 21, 1998

Federal Emergency Management Agency



KEY TO MAP

500-Year Flood Boundary
100-Year Flood Boundary
Zone Designations With Date of Identification, i.e., 12/2/74
100-Year Flood Boundary
300-Year Flood Boundary
Base Flood Elevation Line With Elevation in Feet*
Base Flood Elevation in Feet Where Uniform Within Zone* (EL 987)
Elevation Reference Mark RM7x
x 941.8
*Referenced to the National Geodetic Vertical Datum of 1929

*EXPLANATION OF ZONE DESIGNATIONS

ZONE	EXPLANATION
A	Areas of 100-year flood; base flood elevations and flood hazard factors not determined.
AO	Areas of 100-year shallow flooding where depths are between one (1) and three (3) feet; average depths of inundation are shown, but no flood hazard factors are determined.
AH	Areas of 100-year shallow flooding where depths are between one (1) and three (3) feet; base flood elevations are shown, but no flood hazard factors are determined.
A1-A30	Areas of 100-year flood; base flood elevations and flood hazard factors determined.
A99	Areas of 100-year flood to be protected by flood protection system under construction; base flood elevations and flood hazard factors determined.
B	Areas between limits of the 100-year flood and 500-year flood; or certain areas subject to 100-year flooding with average depths less than one (1) foot or where the contributing drainage area is less than one square mile; or areas protected by levees from the base flood. (Medium shading)
C	Areas of minimal flooding. (No shading)
D	Areas of undetermined, but possible, flood hazards.
V	Areas of 100-year coastal flood with velocity (wave action); base flood elevations and flood hazard factors not determined.
V1-V30	Areas of 100-year coastal flood with velocity (wave action); base flood elevations and flood hazard factors determined.

NOTES TO USER

Certain areas not in the special flood hazard area (zones A and V) may be protected by flood control structures.

This map is for flood insurance purposes only; it does not necessarily show all areal subject to flooding in the community or all planimetric features outside special flood hazard areas.

For adjoining map panels, see separately printed Index To Map Panels.

INITIAL IDENTIFICATION:
JUNE 13, 1978

FLOOD HAZARD BOUNDARY MAP REVISIONS:

FLOOD INSURANCE RATE MAP EFFECTIVE:
FEBRUARY 15, 1980

FLOOD INSURANCE RATE MAP REVISIONS:

Refer to the FLOOD INSURANCE RATE MAP INDEX FOR EFFECTIVE date(s) OF NEW REVISION(S) to determine when actuarial rates apply to structures in the zone(s) with revisions or structures have been added.

For information if flood insurance is available in this community, contact your insurance agent, or call the National Flood Insurance Program, at (800) 638-6620, or (800) 424-8872.

APPROXIMATE SCALE
1000 0 2000 4000 FEET

NATIONAL FLOOD INSURANCE PROGRAM

FIRM
FLOOD INSURANCE RATE MAP

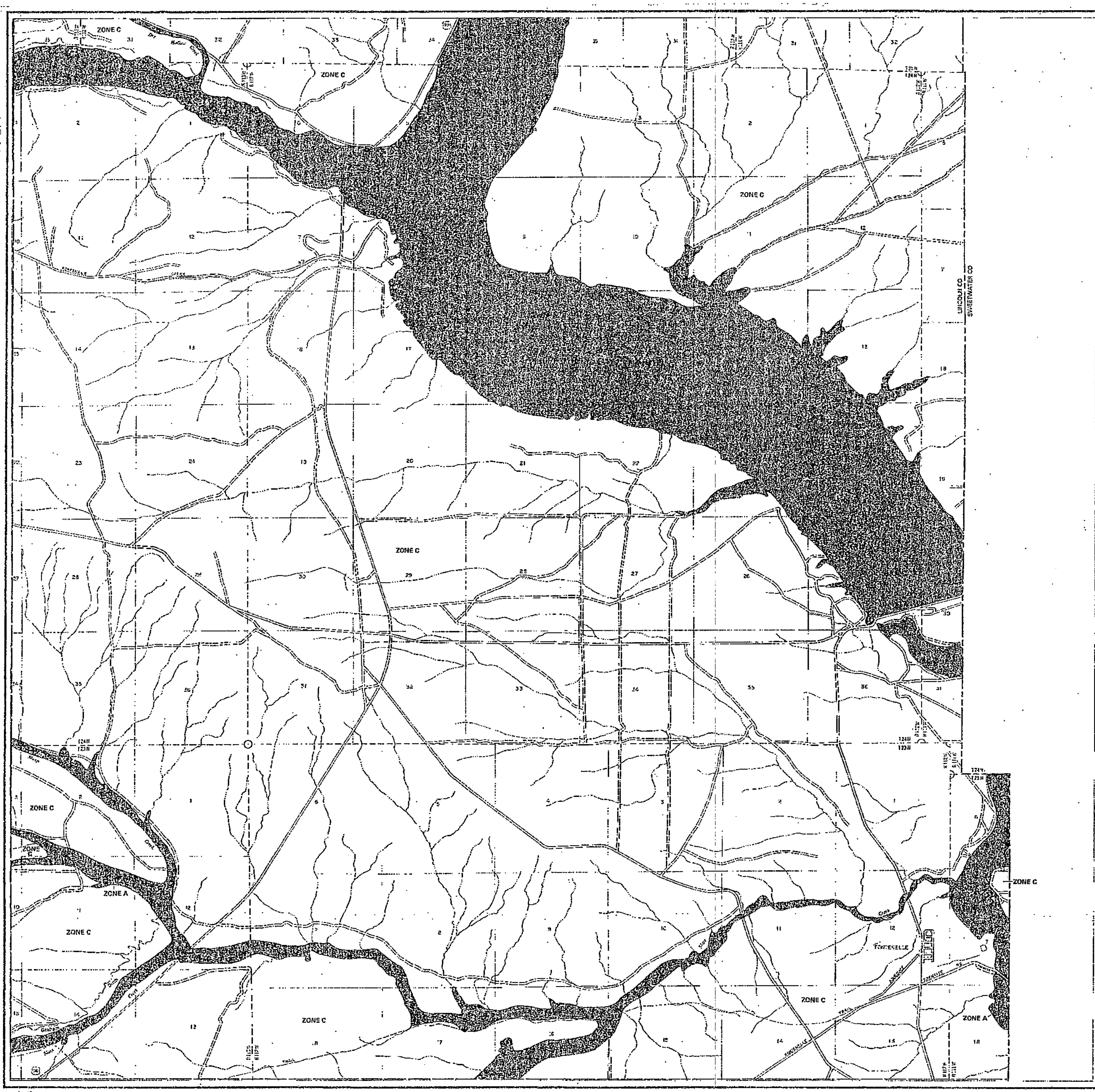
LINCOLN COUNTY, WYOMING
(UNINCORPORATED AREAS)

PANEL 850 OF 1275
(SEE MAP INDEX FOR PANELS NOT PRINTED)

COMMUNITY-PANEL NUMBER
560032 0850 B

EFFECTIVE DATE:
FEBRUARY 15, 1980

U.S. DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT
FEDERAL INSURANCE ADMINISTRATION



KEY TO MAP

500-Year Flood Boundary	
100-Year Flood Boundary	
Zone Designations* With Date of Identification e.g., 12/2/74	ZONE B / ZONE B
100-Year Flood Boundary	
500-Year Flood Boundary	
Base Flood Elevation Line With Elevation In Feet**	513
Base Flood Elevation in Feet Where Uniform Within Zone**	(EL 987)
Elevation Reference Mark	RM7 x
River Mile	• M1.5

**Referenced to the National Geodetic Vertical Datum of 1929

*EXPLANATION OF ZONE DESIGNATIONS

ZONE	EXPLANATION
A	Areas of 100-year flood; base flood elevations and flood hazard factors not determined.
AO	Areas of 100-year shallow flooding where depths are between one (1) and three (3) feet; average depths of inundation are shown, but no flood hazard factors are determined.
AH	Areas of 100-year shallow flooding where depths are between one (1) and three (3) feet; base flood elevations are shown, but no flood hazard factors are determined.
A1-A30	Areas of 100-year flood; base flood elevations and flood hazard factors determined.
A99	Areas of 100-year flood to be protected by flood protection system under construction; base flood elevations and flood hazard factors not determined.
B	Areas between limits of the 100-year flood and 500-year flood; or certain areas subject to 100-year flooding with average depths less than one (1) foot or where the contributing drainage area is less than one square mile; or areas protected by levees from the base flood. (Medium shading)
C	Areas of minimal flooding. (No shading)
D	Areas of undetermined, but possible, flood hazards.
V	Areas of 100-year coastal flood with velocity (wave action); base flood elevations and flood hazard factors not determined.
V1-V30	Areas of 100-year coastal flood with velocity (wave action); base flood elevations and flood hazard factors determined.

NOTES TO USER

Certain areas not in the special flood hazard areas (zones A and V) may be protected by flood control structures.

This map is for flood insurance purposes only; it does not necessarily show all areas subject to flooding in the community or all planimetric features outside special flood hazard areas.

For adjoining map panels, see separately printed Index To Map Panels.

INITIAL IDENTIFICATION:
JUNE 13, 1978

FLOOD HAZARD BOUNDARY MAP REVISIONS:

FLOOD INSURANCE RATE MAP EFFECTIVE:
FEBRUARY 15, 1980

FLOOD INSURANCE RATE MAP REVISIONS:

Refer to the FLOOD INSURANCE RATE MAP EFFECTIVE date shown on this map to determine when actuarial rates apply to structures in the zones where elevations or depths have been established.

To determine if flood insurance is available in this community, contact your insurance agent, or call the National Flood Insurance Program, at (800) 638-6620, or (800) 424-8872.

N

APPROXIMATE SCALE

2000 0 2000 FEET

NATIONAL FLOOD INSURANCE PROGRAM

FIRM
FLOOD INSURANCE RATE MAP

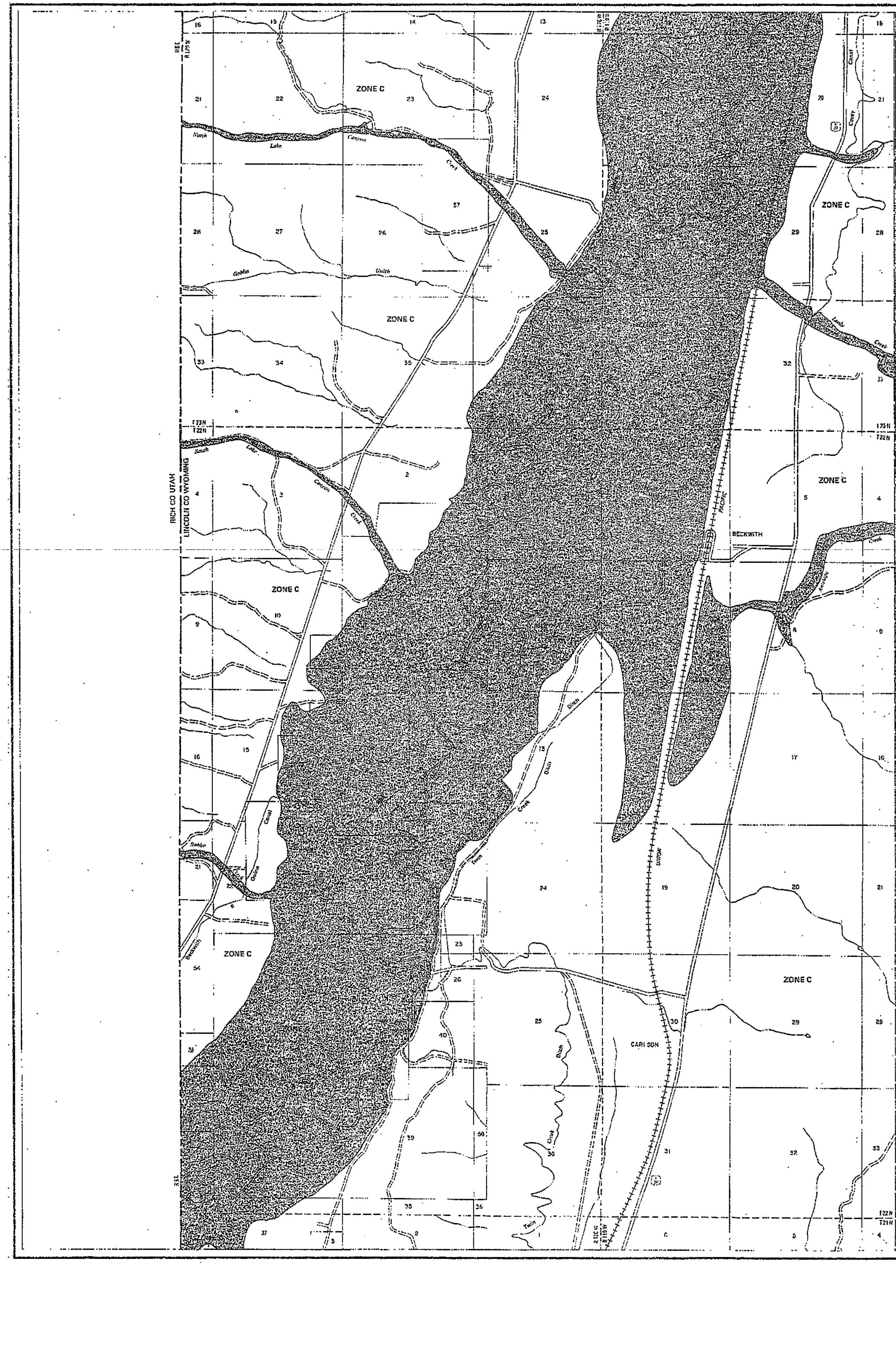
LINCOLN COUNTY, WYOMING
(UNINCORPORATED AREAS)

PANEL 900 OF 1275
(SEE MAP INDEX FOR PANELS NOT PRINTED)

COMMUNITY-PANEL NUMBER
560032 0900 B

EFFECTIVE DATE:
FEBRUARY 15, 1980

U.S. DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT
FEDERAL INSURANCE ADMINISTRATION



KEY TO MAP

500-Year Flood Boundary — ZONE B
100-Year Flood Boundary
Zone Designations* With Date of Identification e.g., 12/2/74
100-Year Flood Boundary — ZONE B
500-Year Flood Boundary
Base Flood Elevation Line With Elevation In Feet** — 513
Base Flood Elevation in Feet Where Uniform Within Zone** — (EL 987)
Elevation Reference Mark — RM7×
River Mile — • M1.5

**Referenced to the National Geodetic Vertical Datum of 1929

*EXPLANATION OF ZONE DESIGNATIONS

ZONE	EXPLANATION
A	Areas of 100-year flood; base flood elevations and flood hazard factors not determined.
AO	Areas of 100-year shallow flooding where depths are between one (1) and three (3) feet; average depths of inundation are shown, but no flood hazard factors are determined.
AH	Areas of 100-year shallow flooding where depths are between one (1) and three (3) feet; base flood elevations are shown, but no flood hazard factors are determined.
A1-A30	Areas of 100-year flood; base flood elevations and flood hazard factors determined.
A99	Areas of 100-year flood to be protected by flood protection system under construction; base flood elevations and flood hazard factors not determined.
B	Areas between limits of the 100-year flood and 500-year flood; or certain areas subject to 100-year flooding with average depths less than one (1) foot or where the contributing drainage area is less than one square mile; or areas protected by levees from the base flood. (Medium shading)
C	Areas of minimal flooding. (No shading)
D	Areas of undetermined, but possible, flood hazards.
V	Areas of 100-year coastal flood with velocity (wave action); base flood elevations and flood hazard factors not determined.
V1-V30	Areas of 100-year coastal flood with velocity (wave action); base flood elevations and flood hazard factors determined.

NOTES TO USER

Certain areas not in the special flood hazard areas (zones A and V) may be protected by flood control structures.

This map is for flood insurance purposes only; it does not necessarily show all areas subject to flooding in the community or all planimetric features outside special flood hazard areas.

For adjoining map panels, see separately printed Index To Map Panels.

INITIAL IDENTIFICATION:
JUNE 13, 1978

FLOOD HAZARD BOUNDARY MAP REVISIONS:

FLOOD INSURANCE RATE MAP EFFECTIVE:
FEBRUARY 15, 1980

FLOOD INSURANCE RATE MAP REVISIONS:

Refer to the FLOOD INSURANCE RATE MAP EFFECTIVE date shown on this map to determine when actuarial rates apply to structures in the zones where elevations or depths have been established.

To determine if flood insurance is available in this community, contact your insurance agent, or call the National Flood Insurance Program, at (800) 638-6620, or (800) 424-8872.

APPROXIMATE SCALE
2000 0 2000 FEET

NATIONAL FLOOD INSURANCE PROGRAM

FIRM
FLOOD INSURANCE RATE MAP

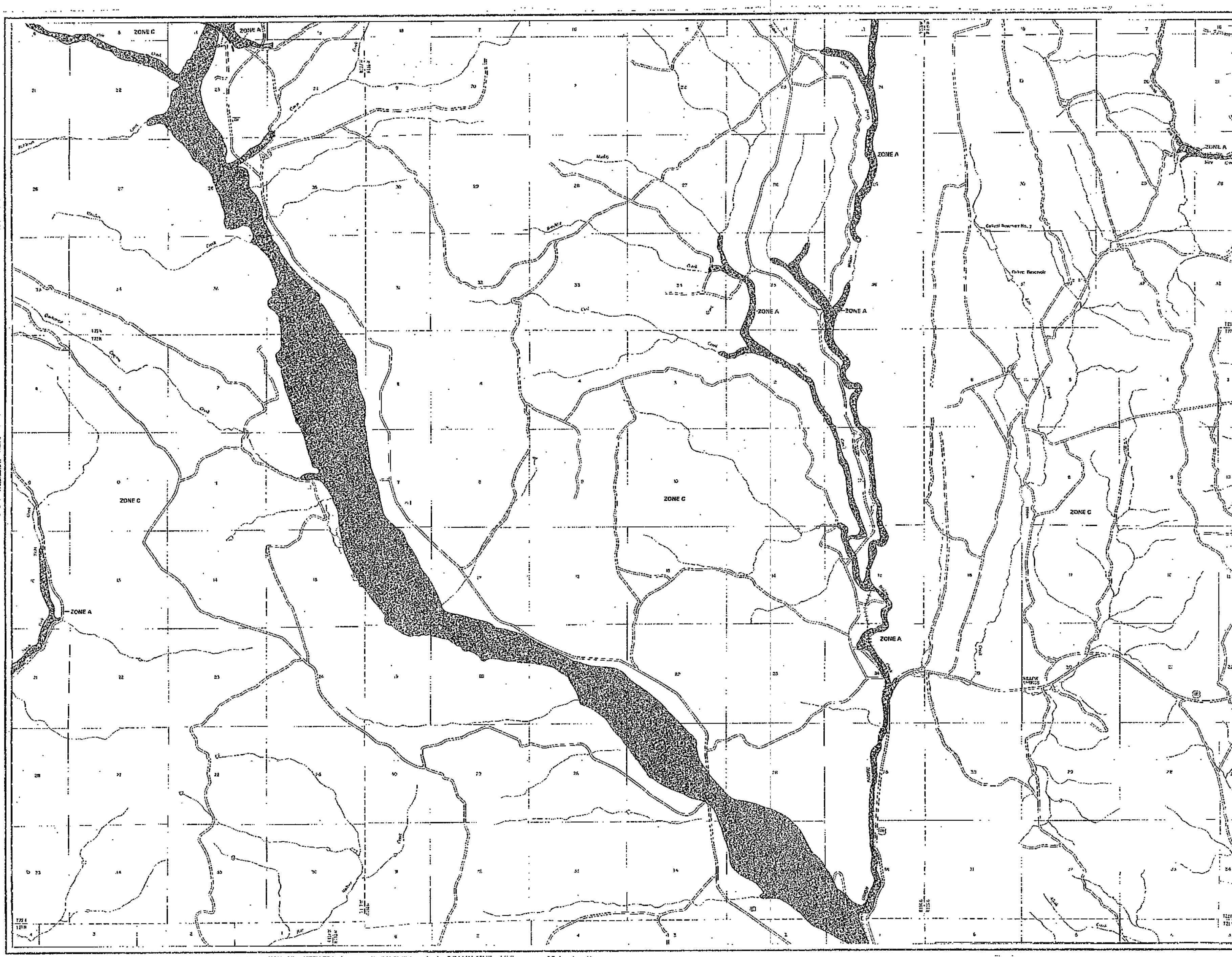
LINCOLN COUNTY, WYOMING
(UNINCORPORATED AREAS)

PANEL 925 OF 1275
(SEE MAP INDEX FOR PANELS NOT PRINTED)

COMMUNITY-PANEL NUMBER
560032 0925 B

EFFECTIVE DATE:
FEBRUARY 15, 1980

U.S. DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT
FEDERAL INSURANCE ADMINISTRATION



KEY TO MAP

500-Year Flood Boundary	ZONE B
100-Year Flood Boundary	ZONE A
Zone Designations* With Date of Identification e.g., 12/2/74	
100-Year Flood Boundary	
500-Year Flood Boundary	ZONE B
Base Flood Elevation Line With Elevation In Feet**	513
Base Flood Elevation in Feet Where Uniform Within Zone**	(EL 987)
Elevation Reference Mark	RM7x
River Mile	•M1.5

**Referenced to the National Geodetic Vertical Datum of 1929

*EXPLANATION OF ZONE DESIGNATIONS

ZONE	EXPLANATION
A	Areas of 100-year flood; base flood elevations and flood hazard factors not determined.
AO	Areas of 100-year shallow flooding where depths are between one (1) and three (3) feet; average depths of inundation are shown, but no flood hazard factors are determined.
AH	Areas of 100-year shallow flooding where depths are between one (1) and three (3) feet; base flood elevations are shown, but no flood hazard factors are determined.
A1-A30	Areas of 100-year flood; base flood elevations and flood hazard factors determined.
A99	Areas of 100-year flood to be protected by flood protection system under construction; base flood elevations and flood hazard factors not determined.
B	Areas between limits of the 100-year flood and 500-year flood; or certain areas subject to 100-year flooding with average depths less than one (1) foot or where the contributing drainage area is less than one square mile; or areas protected by levees from the base flood. (Medium shading)
C	Areas of minimal flooding. (No shading)
D	Areas of undetermined, but possible, flood hazards.
V	Areas of 100-year coastal flood with velocity (wave action); base flood elevations and flood hazard factors not determined.
V1-V30	Areas of 100-year coastal flood with velocity (wave action); base flood elevations and flood hazard factors determined.

NOTES TO USER

Certain areas not in the special flood hazard areas (zones A and V) may be protected by flood control structures.

This map is for flood insurance purposes only; it does not necessarily show all areas subject to flooding in the community or all planimetric features outside special flood hazard areas.

For adjoining map panels, see separately printed Index To Map Panels.

INITIAL IDENTIFICATION:
JUNE 13, 1979

FLOOD HAZARD BOUNDARY MAP REVISIONS:

FLOOD INSURANCE RATE MAP EFFECTIVE:
FEBRUARY 15, 1980

FLOOD INSURANCE RATE MAP REVISIONS:

Refer to the FLOOD INSURANCE RATE MAP EFFECTIVE date shown on this map to determine when actuarial rates apply to structures in the zones where elevations or depths have been established.

To determine if flood insurance is available in this community, contact your insurance agent, or call the National Flood Insurance Program, at (800) 638-6620, or (800) 424-8872.

APPROXIMATE SCALE

2000 0 2000 FEET

NATIONAL FLOOD INSURANCE PROGRAM

FIRM
FLOOD INSURANCE RATE MAP

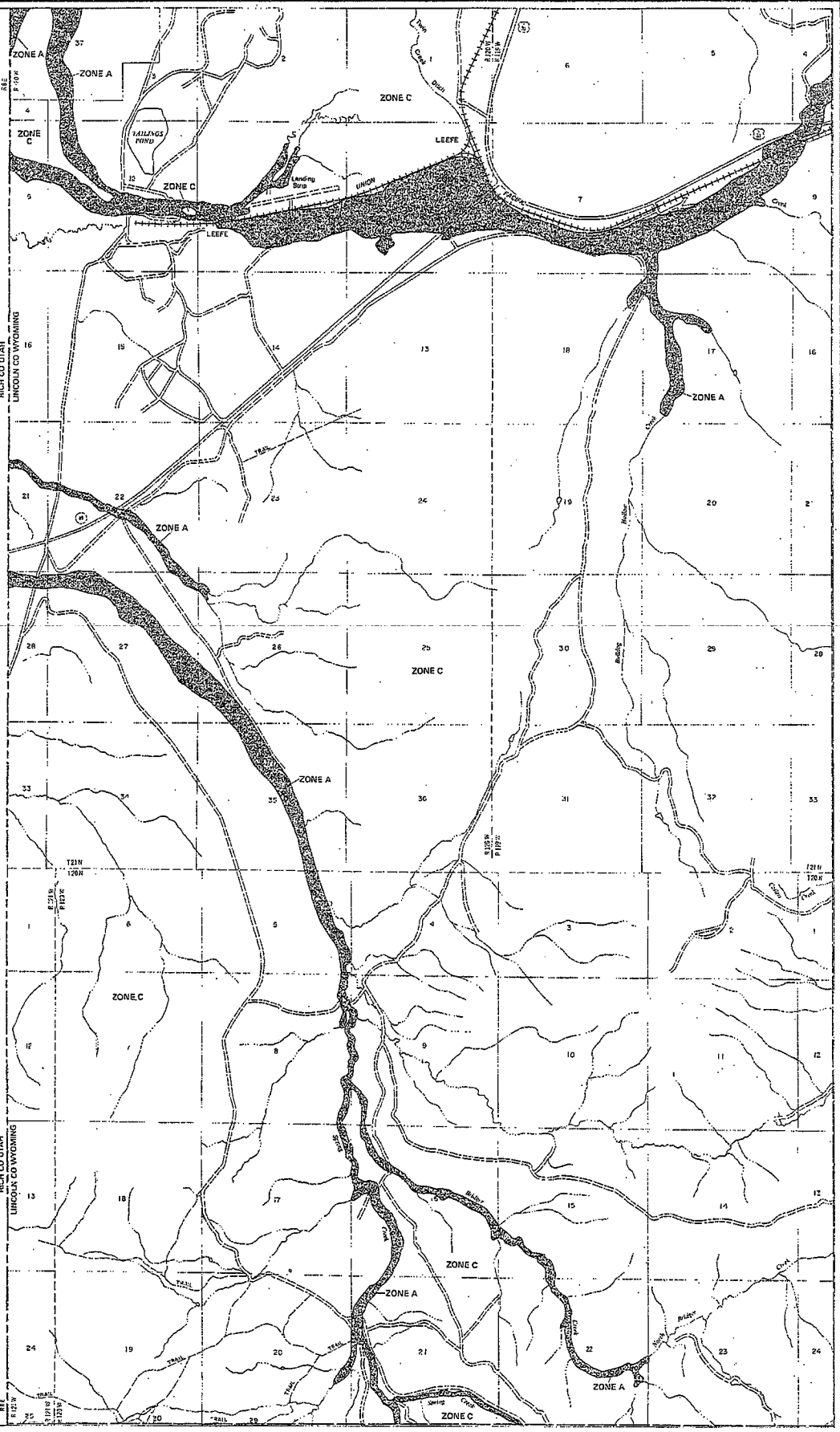
LINCOLN COUNTY, WYOMING
(UNINCORPORATED AREAS)

PANEL 975 OF 1275
(SEE MAP INDEX FOR PANELS NOT PRINTED)

COMMUNITY-PANEL NUMBER
560032 0975 B

EFFECTIVE DATE:
FEBRUARY 15, 1980

U.S. DEPARTMENT OF HOUSING
AND URBAN DEVELOPMENT
FEDERAL INSURANCE ADMINISTRATION



KEY TO MAP

500-Year Flood Boundary
100-Year Flood Boundary
Zone Designations* With Date of Identification e.g., 12/2/74
100-Year Flood Boundary
500-Year Flood Boundary
Base Flood Elevation Line With Elevation in Feet**
Base Flood Elevation in Feet Where Uniform Within Zone** (EL 982)
Elevation Reference Mark RM7 ×
River Mile • M1.5

ZONE B
ZONE B
ZONE B
513

**Referenced to the National Geodetic Vertical Datum of 1929

*EXPLANATION OF ZONE DESIGNATIONS

ZONE	EXPLANATION
A	Areas of 100-year (coast) base flood elevations and flood hazard factors not determined.
AE	Areas of 100-year shallow flooding where depths are between one (1) and three (3) feet; average depths of inundation are shown, but no flood hazard factors are determined.
AH	Areas of 100-year shallow flooding where depths are between one (1) and three (3) feet; base flood elevations are shown, but no flood hazard factors are determined.
A1-A30	Areas of 100-year coast base flood elevations and flood hazard factors determined.
A99	Areas of 100-year flood to be protected by flood protection system under construction; base flood elevations and flood hazard factors not determined.
B	Areas between limits of the 100-year flood and 500-year flood; or certain areas subject to 100-year flooding with average depths less than one (1) foot or where the contributing drainage area is less than one square mile; or areas protected by levees from the base flood. (Medium shading)
C	Areas of minimal flooding. (No shading)
D	Areas of undetermined, but possible, flood hazards
V	Areas of 100-year coastal flood with velocity (wave action); base flood elevations and flood hazard factors not determined.
V1-V30	Areas of 100-year coastal flood with velocity (wave action); base flood elevations and flood hazard factors determined.

NOTES TO USER

Certain areas not in the special flood hazard areas (zones A and V) may be protected by flood control structures.

This map is for flood insurance purposes only; it does not necessarily show all areas subject to flooding in the community or all planimetric features outside special flood hazard areas.

For adjoining map panels, see separately printed Index To Map Panels.

INITIAL IDENTIFICATION:
JUNE 13, 1978

FLOOD HAZARD BOUNDARY MAP REVISIONS:

FLOOD INSURANCE RATE MAP EFFECTIVE:
FEBRUARY 15, 1980

FLOOD INSURANCE RATE MAP REVISIONS:

Refer to the FLOOD INSURANCE RATE MAP EFFECTIVE date shown on risk map to determine when actuarial rates apply to structures in the zones where elevations or depths have been established.

To determine if flood insurance is available in this community, contact your insurance agent, or call the National Flood Insurance Program, at (800) 638-6620, or (800) 424-8872.

APPROXIMATE SCALE
2000 0 2000 FEET

NATIONAL FLOOD INSURANCE PROGRAM

FIRM
FLOOD INSURANCE RATE MAP

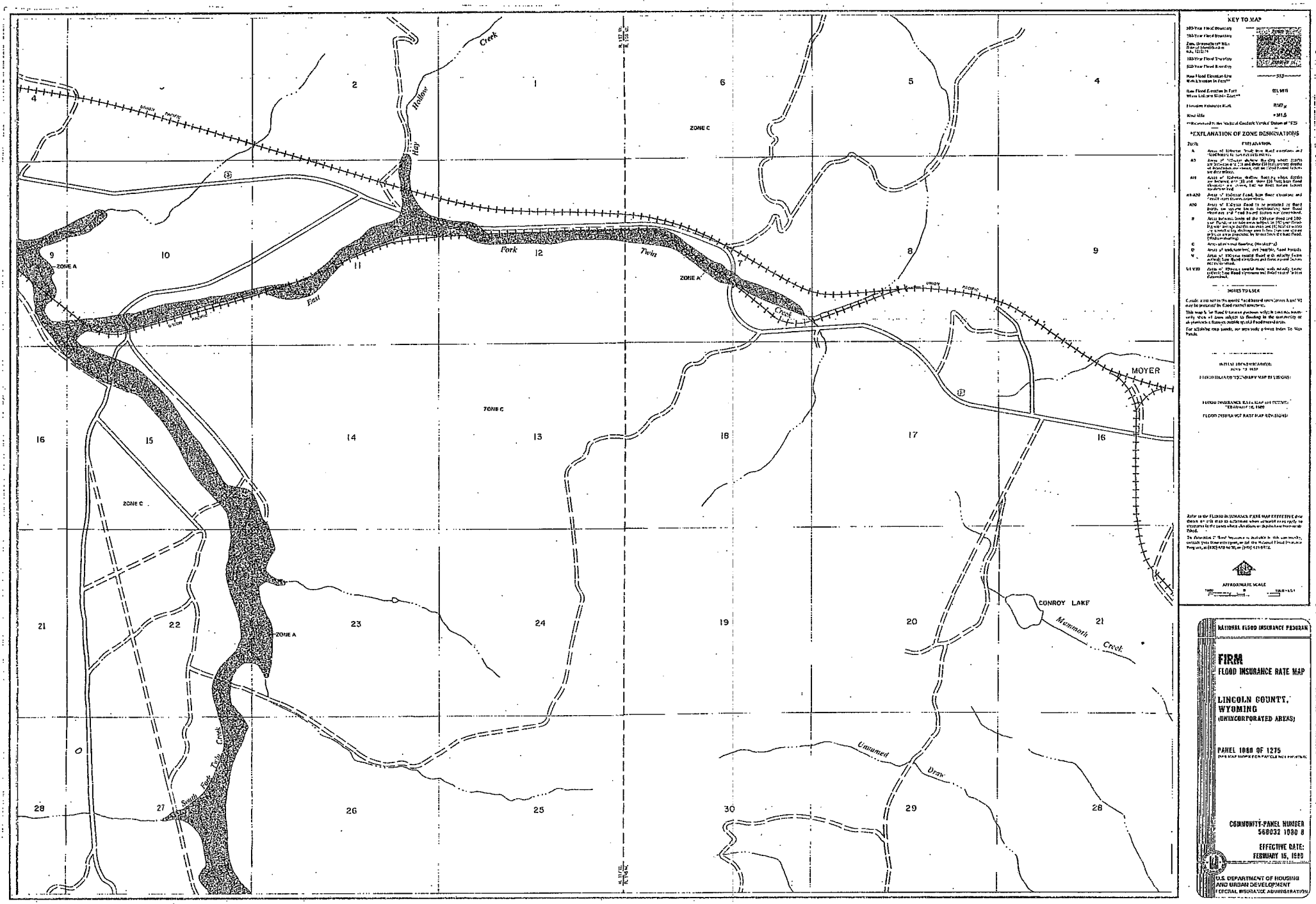
LINCOLN COUNTY, WYOMING
(UNINCORPORATED AREAS)

PANEL 1050 OF 1275
(SEE MAP INDEX FOR PANELS NOT PRINTED)

COMMUNITY-PANEL NUMBER
560032 1050 B

EFFECTIVE DATE:
FEBRUARY 15, 1980

U.S. DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT
FEDERAL INSURANCE ADMINISTRATION



KEY TO MAP

100-Year Flood Boundary

500-Year Flood Boundary

Zone Designations

1000-Year Flood Boundary

500-Year Flood Boundary

Base Flood Elevation Line With Elevation in Feet*

Base Flood Elevation in Feet Where Uniform Within Zone*

Elevation Reference Mark

River Mile

*Referenced to the National Geodetic Vertical Datum of 1929

*EXPLANATION OF ZONE DESIGNATIONS

ZONE	EXPLANATION
A	Areas of 100-year flood; base flood elevations and flood hazards not determined.
AO	Areas of 100-year shallow flood with average depths of 1 to 3 feet; depths derived from engineering analyses of flooding sources; base flood elevations determined.
AH	Areas of 100-year shallow flooding where depths are between one and three feet; base flood elevations determined.
A1-A30	Areas of 100-year flood; base flood elevations and flood hazard factors determined.
A99	Areas of 100-year flood to be protected by flood protection system under construction; base flood elevations not determined.
B	Areas between limits of the 100-year flood and 500-year flood; or certain areas subject to 100-year flooding with average depths less than one foot or where the contributing drainage area is less than one square mile; or areas protected by levees from base flood. (Medium shading)
C	Areas of minimal flooding. (No shading)
D	Areas of undetermined, but possible, flood hazards.
V	Areas of 100-year coastal flood with velocity (wave action); base flood elevations and flood hazard factors determined.
V1-V30	Areas of 100-year coastal flood with velocity (wave action); base flood elevations and flood hazard factors determined.

NOTES TO USER

Certain areas not in the special flood hazard areas (Zones A and V) may be protected by flood control structures.

This map is for flood insurance purposes only; it does not necessarily show all areas subject to flooding in the community or all planimetric features outside special flood hazard areas.

For adjoining map panels, see separately printed Index to Map Panels.

INITIAL IDENTIFICATION:
JUNE 15, 1987
FLOOD HAZARD BOUNDARY MAP REVISIONS:

FLOOD INSURANCE RATE MAP EFFECTIVE:
FEBRUARY 15, 1989
FLOOD INSURANCE RATE MAP REVISIONS:

Refer to the FLOOD INSURANCE RATE MAP EFFECTIVE date shown on this map to determine when updated maps may apply to structures in the areas where additions or deletions have been made. Effective

To determine if flood insurance is available in this community, contact your insurance agent or call the National Flood Insurance Program, at (800) 638-6620, or (800) 424-8872.

APPROXIMATE SCALE

NATIONAL FLOOD INSURANCE PROGRAM

FIRM
FLOOD INSURANCE RATE MAP

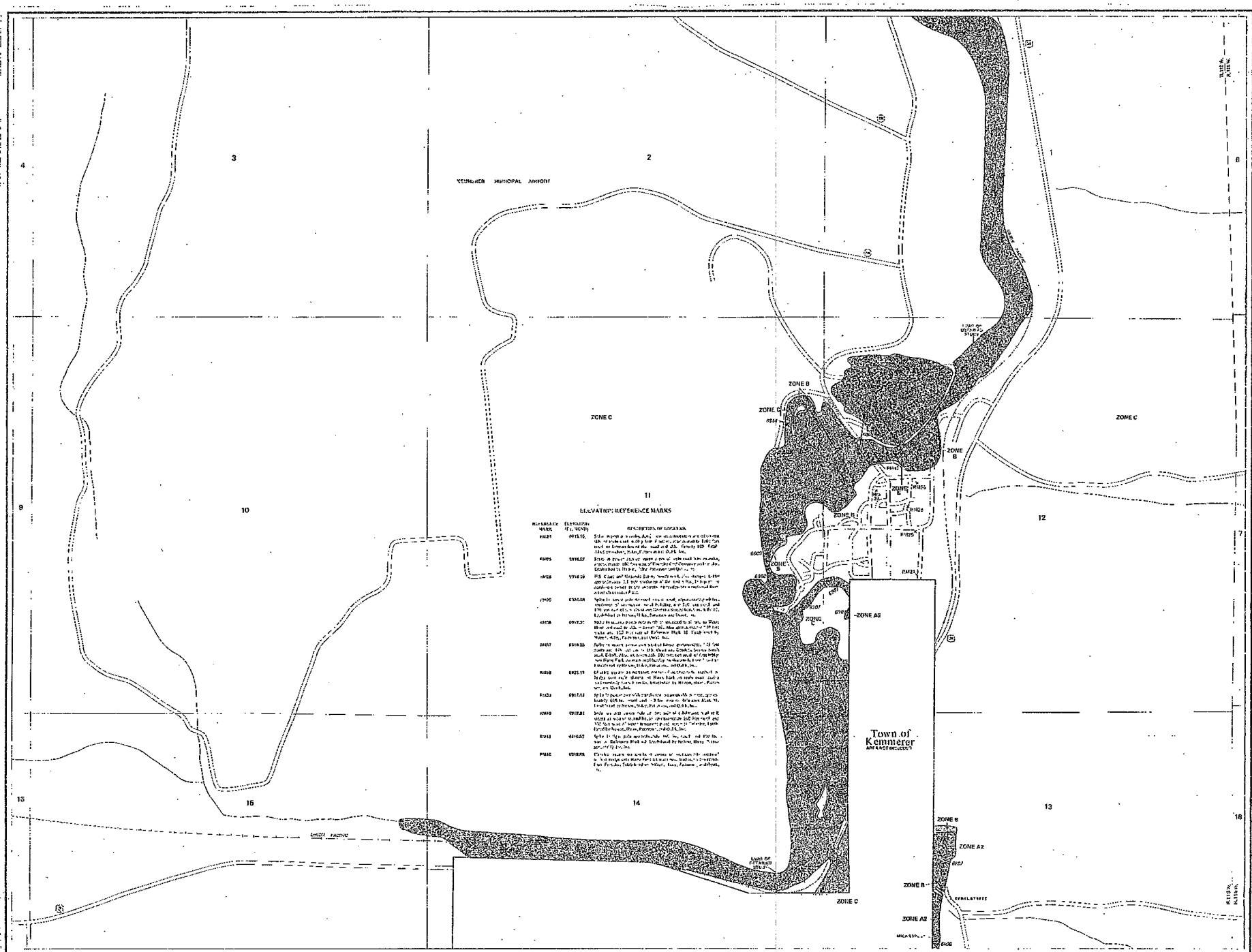
LINCOLN COUNTY, WYOMING
(UNINCORPORATED AREAS)

PANEL 1080 OF 1275

COMMUNITY-PANEL NUMBER
560032 1080 B

EFFECTIVE DATE:
FEBRUARY 15, 1989

U.S. DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT
FEDERAL INSURANCE ADMINISTRATION



KEY TO MAP

- 500-Year Flood Boundary
- 100-Year Flood Boundary
- Zone Designations
- 100-Year Flood Boundary
- 500-Year Flood Boundary
- Base Flood Elevation Line With Elevation In Feet*
- Base Flood Elevation In Feet (Where Uniform Within Zone)
- Elevation Reference Mark
- River Mile

*Referenced to the National Geodetic Vertical Datum of 1929

*EXPLANATION OF ZONE DESIGNATIONS

ZONE	EXPLANATION
A	Areas of 100-year flood; base flood elevations and flood hazard factors not determined.
AO	Areas of 100-year shallow flooding where depths are between one (1) and three (3) feet; areas of 100-year flood; base flood elevations and flood hazard factors not determined.
AH	Areas of 100-year shallow flooding where depths are between one (1) and three (3) feet; base flood elevations are shown; but no flood hazard factors are determined.
A1-A30	Areas of 100-year flood; base flood elevations and flood hazard factors determined.
A99	Areas of 100-year flood to be protected by flood protection system under construction; base flood elevations and flood hazard factors not determined.
B	Areas between limits of the 100-year flood and 500-year flood; or certain areas subject to 100-year flooding with average depths less than one foot or where the contributing drainage area is less than one square mile; or areas protected by levees from base flood. (Medium shading)
C	Areas of minimal flooding. (No shading)
D	Areas of undetermined, but possible, flood hazards.
V	Areas of 100-year coastal flood with velocity (wave action); base flood elevations and flood hazard factors not determined.
V1-V30	Areas of 100-year coastal flood with velocity (wave action); base flood elevations and flood hazard factors determined.

NOTES TO USER

Certain areas not in the special flood hazard areas (Zones A and V) may be protected by flood control structures.

This map is for flood insurance purposes only; it does not necessarily show all areas subject to flooding, or the relative risk of flooding associated with particular locations.

For adjoining map panels, see separately printed Index To Map Panels.

INITIAL IDENTIFICATION:
JUNE 14, 1974

FLOOD HAZARD BOUNDARY MAP REVISION:

FLOOD INSURANCE RATE MAP EFFECTIVE:
FEBRUARY 15, 1980

FLOOD INSURANCE RATE MAP REVISION:

Base (100-year) flood elevations shown on this map apply only landward of the shoreline of inland waters, such as lakes or reservoirs. Boundaries of the floods of other frequencies shown on this map also apply only landward of the shoreline of inland waters.

To determine if flood insurance is available in this community, contact your insurance agent or call the National Flood Insurance Program, at (800) 638-6620, or (800) 424-8872.

APPROXIMATE SCALE

NATIONAL FLOOD INSURANCE PROGRAM

FIRM
FLOOD INSURANCE RATE MAP

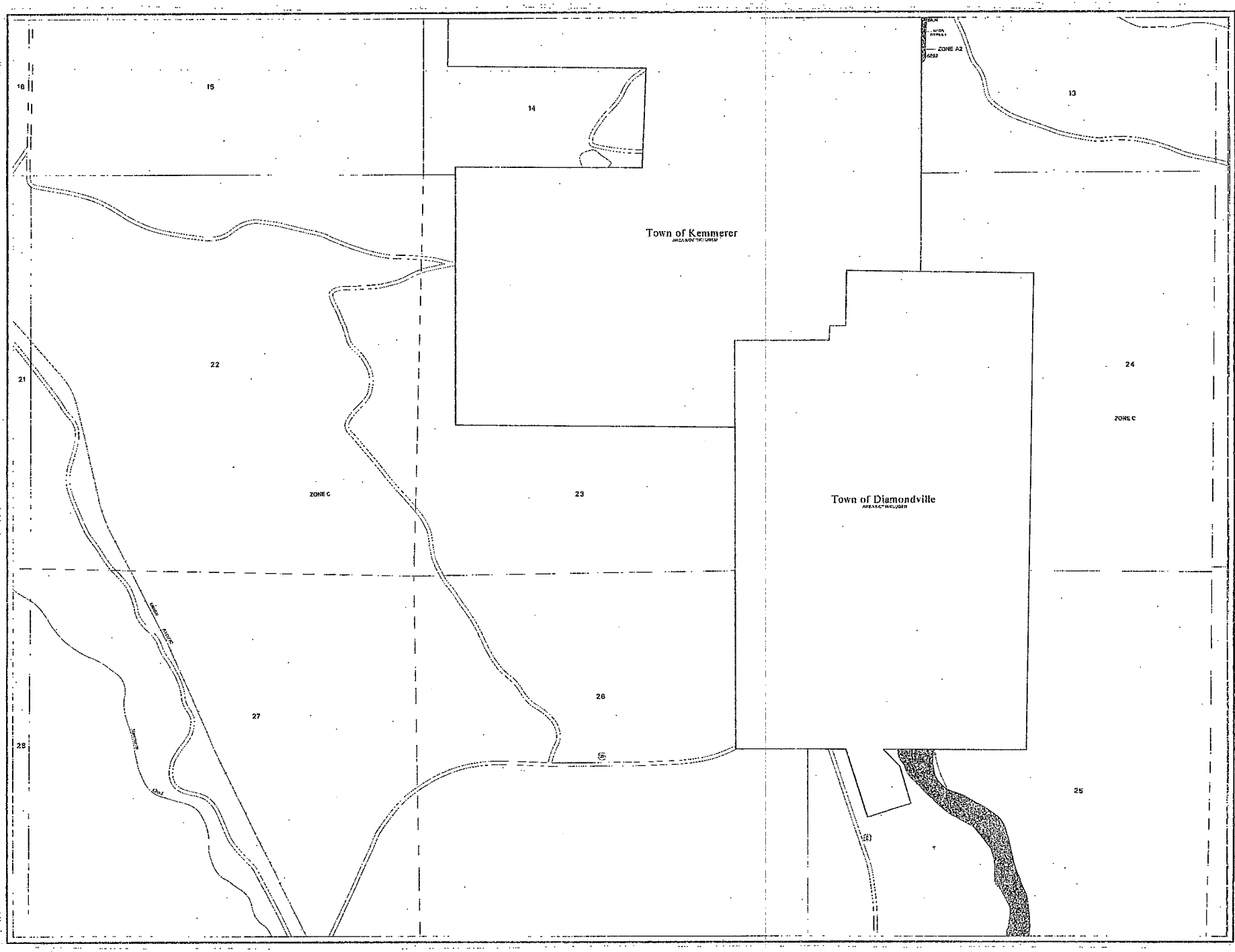
LINCOLN COUNTY, WYOMING
(UNINCORPORATED AREAS)

PANEL 1081 OF 1275
(SEE MAP INDEX FOR PANELS NOT PRINTED)

COMMUNITY-PANEL NUMBER
560032 1081 B

EFFECTIVE DATE:
FEBRUARY 15, 1980

U.S. DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT
FEDERAL INSURANCE ADMINISTRATION



KEY TO MAP

500-Year Flood Boundary

100-Year Flood Boundary

Zone Designations**

Base Flood Elevation Line (BFE)

Base Flood Elevation in Feet (EL 857)

Cross Section

Coastal Transect

Coastal Transect Baseline

Profile Baseline

Limit of Moderate Wave Action (LiMWA)

**Refer to the Notice to Flood Insurance Study User Guide at http://www.fema.gov/fhm/ins_toc.shtm

EXPLANATION OF ZONE DESIGNATIONS

ZONE	EXPLANATION
A	Areas of 100-year flood; base flood elevations and flood hazard factors not determined.
AE	Areas of 100-year flood; base flood elevations and flood hazard factors determined.
AH	Areas of 100-year shallow flooding with average depths of 1 to 3 feet. Average depths of pools determined. For flood insurance rating purposes, base flood elevations are provided.
AO	Areas of 100-year shallow flooding with average depths of 1 to 3 feet. Average depths of flow determined. For flood insurance rating purposes, flood depths are provided.
A1-A30	Areas of 100-year flood; base flood elevations and flood hazard factors determined.
A99	Areas of 100-year flood to be protected by flood protection system under construction; base flood elevations not determined.
B	Areas between limits of the 100-year flood and 500-year flood; or certain areas subject to 100-year flooding with average depths less than 1 foot or where the contributing drainage area is less than 1 square mile; or areas protected by levees from the base flood. (Medium shading)
C	Areas of minimal flood hazard. (No shading)
D	Areas of undetermined, but possible, flood hazards.
V	Areas of 100-year coastal flood with velocity (wave action); base flood elevations and flood hazard factors not determined.
V1-V30	Areas of 100-year coastal flood with velocity (wave action); base flood elevations and flood hazard factors determined.

NOTES TO USER

Certain areas not in the special flood hazard areas (Zones A and V) may be protected by flood control structures.

This map is for flood insurance purposes only; it does not necessarily show all areas subject to flooding in the community or all potential flooding sources. Refer to separately printed Index for map panels.

For information on flood insurance studies for this jurisdiction, refer to the Flood Insurance Study report for this jurisdiction.

To obtain more detailed information in areas where Base Flood Elevations (BFEs) and/or floodways have been determined, refer to the Flood Profiles and Floodway Data tables in the Flood Insurance Study report for this jurisdiction.

To determine if flood insurance is available in this community, contact your insurance agent or call the National Flood Insurance Program at (800) 638-6620.

APPROXIMATE SCALE

1" = 500'

NATIONAL FLOOD INSURANCE PROGRAM

FIRM
FLOOD INSURANCE RATE MAP

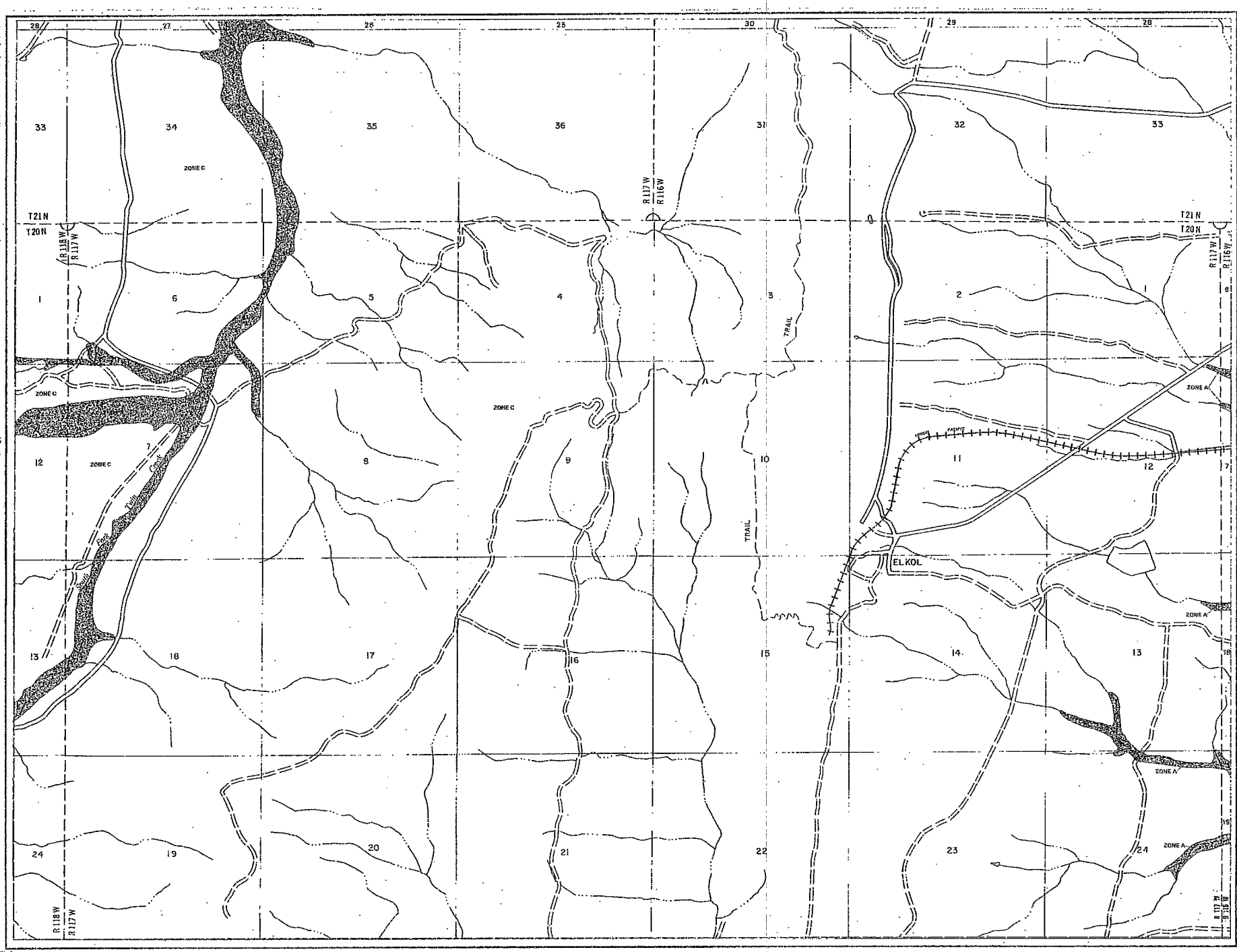
LINCOLN COUNTY, WYOMING
(UNINCORPORATED AREAS)

PANEL 1083 OF 1275

COMMUNITY-PANEL NUMBER
560032 1083 B

EFFECTIVE DATE:
FEBRUARY 15, 1996

U.S. DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT
FEDERAL INSURANCE ADMINISTRATION



KEY TO MAP

*EXPLANATION OF ZONE DESIGNATIONS

ZONE	EXPLANATION
A	Area of 100-year flood; base flood elevations and flood hazard factors not determined.
AO	Area of 100-year shallow flooding where depths are between one (1) and three (3) feet; base flood elevations are shown, but no flood hazard factors are determined.
AH	Area of 100-year shallow flooding where depths are between one (1) and three (3) feet; base flood elevations are shown, but no flood hazard factors are determined.
A1-A30	Areas of 100-year flood; base flood elevations and flood hazard factors determined.
A99	Area of 100-year flood to be protected by flood protection system under construction; base flood elevations and flood hazard factors not determined.
B	Areas between limits of the 100-year flood and 500-year flood; or certain areas subject to 100-year flooding with average depths less than one (1) foot or where the contributing drainage area is less than one square mile; or areas protected by levees from base flood. (Medium shading)
C	Areas of minimal flooding. (No shading)
D	Areas of undetermined, but possible, flood hazards.
V	Areas of 100-year coastal flood with velocity (wave action); base flood elevations and flood hazard factors determined.
V1-V30	Areas of 100-year coastal flood with velocity (wave action); base flood elevations and flood hazard factors determined.

NATIONAL FLOOD INSURANCE PROGRAM

FIRM
FLOOD INSURANCE RATE MAP

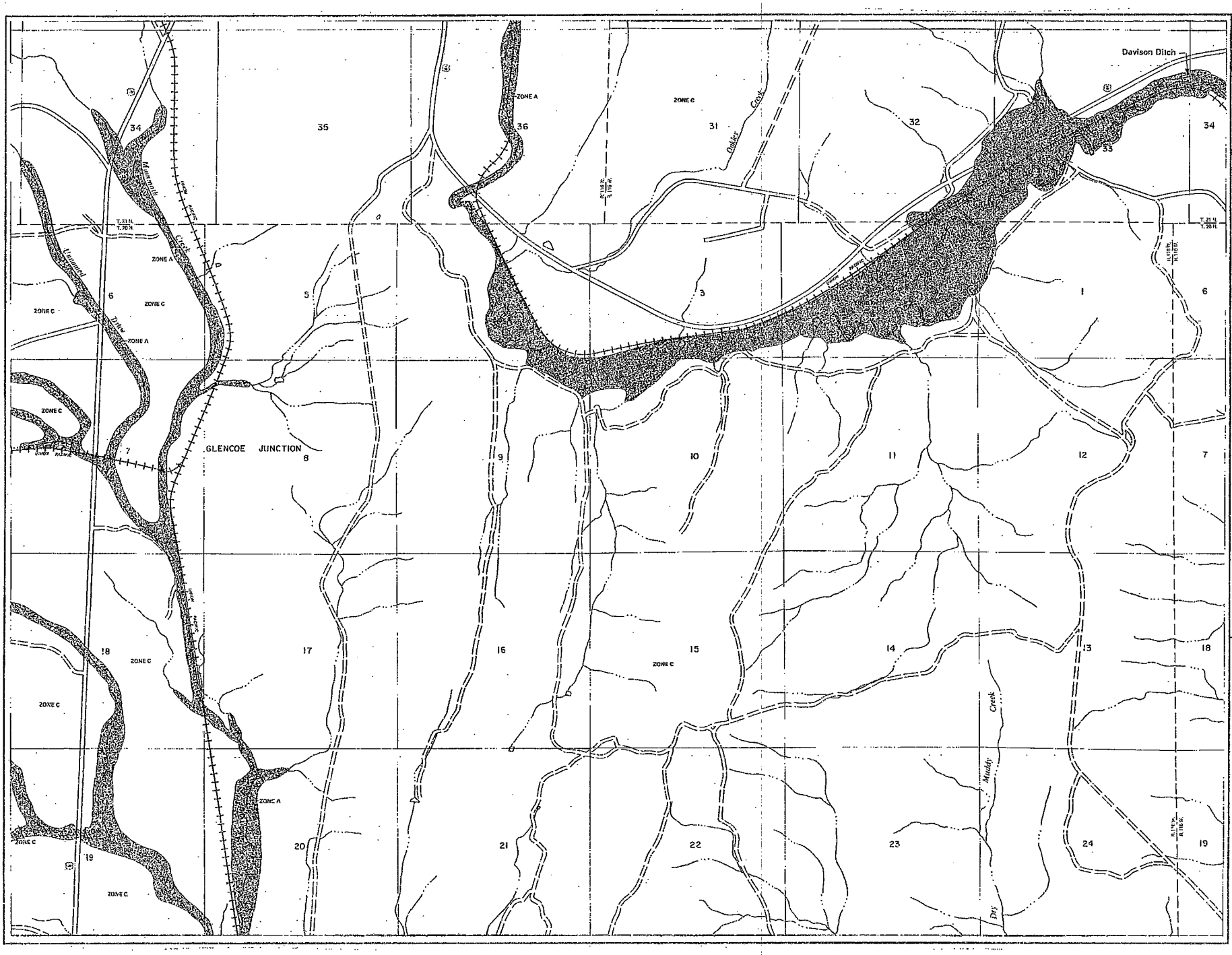
LINCOLN COUNTY, WYOMING
(UNINCORPORATED AREAS)

PANEL 1090 OF 1275

COMMUNITY-PANEL NUMBER
560032 1090 B

EFFECTIVE DATE:
FEBRUARY 15, 1980

U.S. DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT
FEDERAL INSURANCE ADMINISTRATION



KEY TO MAP

100-Year Flood Boundary

500-Year Flood Boundary

Zone Designations

Base Flood Elevation Line

Elevation Reference Mark

*EXPLANATION OF ZONE DESIGNATIONS

ZONE	EXPLANATION
A	Areas of 100-year flood; base flood elevations and flood hazard factors not determined.
A1-A30	Areas of 100-year flood; base flood elevations and flood hazard factors determined.
AH	Areas of 100-year flood; base flood elevations and flood hazard factors determined. Areas of 100-year shallow flooding where depths are between one (1) and three (3) feet; average depths of inundation are shown, but no flood hazard factors are determined.
AO	Areas of 100-year shallow flooding where depths are between one (1) and three (3) feet; average depths of inundation are shown, but no flood hazard factors are determined.
B	Areas between limits of the 100-year flood and 500-year flood; or certain areas subject to 100-year flooding with average depths of less than one foot or where the contributing drainage area is less than one square mile; or areas protected by levees from the base flood. (Medium shading)
C	Areas of minimal flooding. (No shading)
D	Areas of undetermined, but possible, flood hazards.
V	Areas of 100-year coastal flood with velocity (wave action); base flood elevations and flood hazard factors determined.
V1-V30	Areas of 100-year coastal flood with velocity (wave action); base flood elevations and flood hazard factors determined.

*EXPLANATION OF ZONE DESIGNATIONS

NOTES TO USER

ZONE IDENTIFICATION

FLOOD HAZARD BOUNDARY MAP REVISIONS:

FLOOD INSURANCE RATE MAP EFFECTIVE:

FLOOD INSURANCE RATE MAP REVISIONS:

APPROXIMATE SCALE

NATIONAL FLOOD INSURANCE PROGRAM

FIRM
FLOOD INSURANCE RATE MAP

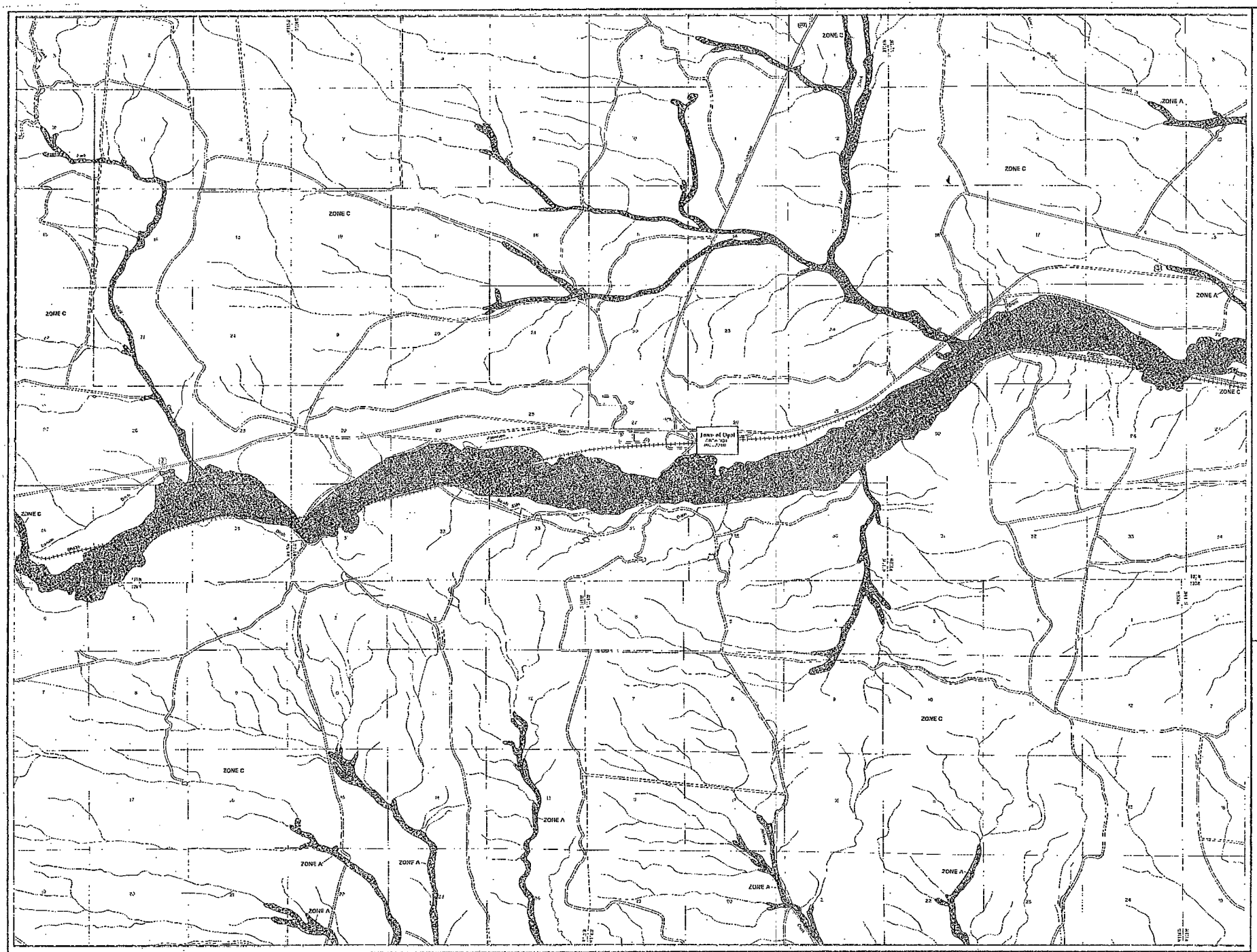
LINCOLN COUNTY, WYOMING
(UNINCORPORATED AREAS)

PANEL 1095 OF 1275

COMMUNITY-PANEL NUMBER
560032 1095 B

EFFECTIVE DATE:
FEBRUARY 15, 1980

U.S. DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT
FEDERAL INSURANCE ADMINISTRATION



KEY TO MAP

EXPLANATION OF ZONE DESIGNATIONS

ZONE	EXPLANATION
A	Area of 100-year flood; base flood elevations and flood hazard factors not determined.
AE	Area of 100-year flood; base flood elevations and flood hazard factors determined.
AH	Area of 100-year shallow flooding where depths are between one (1) and three (3) feet; average depths of inundation are shown, but no flood hazard factors are determined.
A1-A30	Area of 100-year flood; base flood elevations and flood hazard factors determined.
AR	Area of 100-year flood to be protected by flood protection system under construction; base flood elevations and flood hazard factors determined.
B	Area between limits of the 100-year flood and 500-year flood; or certain areas subject to 100-year flooding with average depths less than one foot or where the contributing drainage area is less than one square mile; or areas protected by levees from the base flood. (Medium shading)
C	Area of minimal flooding. (No shading)
D	Area of undetermined, but possible, flood hazards.
V	Area of 100-year coastal flood with velocity (wave action); base flood elevations and flood hazard factors not determined.
V1-V30	Area of 100-year coastal flood with velocity (wave action); base flood elevations and flood hazard factors determined.

EFFECTIVE DATE OF COUNTYWIDE FLOOD INSURANCE RATE MAP: FEBRUARY 15, 1980

FLOOD INSURANCE RATE MAP REVISIONS:

APPROXIMATE SCALE

NATIONAL FLOOD INSURANCE PROGRAM

FIRM
FLOOD INSURANCE RATE MAP

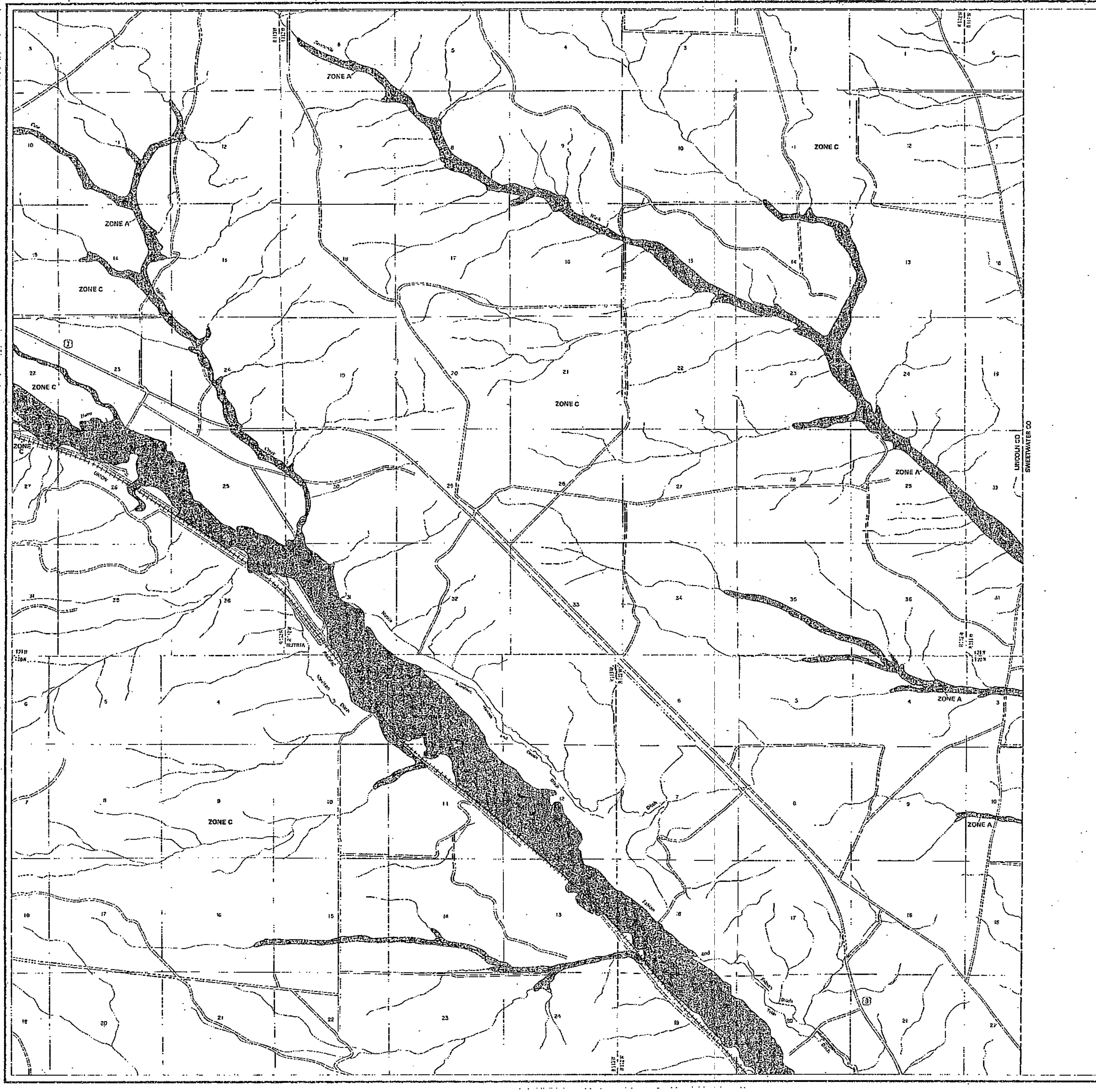
LINCOLN COUNTY, WYOMING (UNINCORPORATED AREAS)

PANEL 1125 OF 1275

COMMUNITY-PANEL NUMBER
560032 1125 B

EFFECTIVE DATE:
FEBRUARY 15, 1980

U.S. DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT
FEDERAL INSURANCE ADMINISTRATION



KEY TO MAP

500-Year Flood Boundary	
100-Year Flood Boundary	
Zone Designations* With Date of Identification e.g., 12/2/74	ZONE B
100-Year Flood Boundary	
500-Year Flood Boundary	
Base Flood Elevation Line With Elevation In Feet**	513
Base Flood Elevation in Feet Where Uniform Within Zone**	(EL 987)
Elevation Reference Mark	RM7 x
River Mile	• M1.5

**Referenced to the National Geodetic Vertical Datum of 1929

*EXPLANATION OF ZONE DESIGNATIONS

ZONE	EXPLANATION
A	Areas of 100-year flood; base flood elevations and flood hazard factors not determined.
A0	Areas of 100-year shallow flooding where depths are between one (1) and three (3) feet; average depths of inundation are shown, but no flood hazard factors are determined.
AH	Areas of 100-year shallow flooding where depths are between one (1) and three (3) feet; base flood elevations are shown, but no flood hazard factors are determined.
A1-A30	Areas of 100-year flood; base flood elevations and flood hazard factors determined.
A99	Areas of 100-year flood to be protected by flood protection system under construction; base flood elevations and flood hazard factors not determined.
B	Areas between limits of the 100-year flood and 500-year flood; or certain areas subject to 100-year flooding with average depths less than one (1) foot or where the contributing drainage area is less than one square mile; or areas protected by levees from the base flood. (Medium shading)
C	Areas of minimal flooding. (No shading)
D	Areas of undetermined, but possible, flood hazards.
V	Areas of 100-year coastal flood with velocity (wave action); base flood elevations and flood hazard factors not determined.
V1-V30	Areas of 100-year coastal flood with velocity (wave action); base flood elevations and flood hazard factors determined.

NOTES TO USER

Certain areas not in the special flood hazard areas (zones A and V) may be protected by flood control structures.

This map is for flood insurance purposes only; it does not necessarily show all areas subject to flooding in the community or all planimetric features outside special flood hazard areas.

For adjoining map panels, see separately printed Index To Map Panels.

INITIAL IDENTIFICATION:
JUNE 13, 1978

FLOOD HAZARD BOUNDARY MAP REVISIONS:

FLOOD INSURANCE RATE MAP EFFECTIVE:
FEBRUARY 15, 1980

FLOOD INSURANCE RATE MAP REVISIONS:

Refer to the FLOOD INSURANCE RATE MAP EFFECTIVE date shown on this map to determine when actuarial rates apply to structures in the zones where elevations or depths have been established.

To determine if flood insurance is available in this community, contact your insurance agent, or call the National Flood Insurance Program, at (800) 638-6620, or (800) 424-8872.

APPROXIMATE SCALE

2000 0 2000 FEET

NATIONAL FLOOD INSURANCE PROGRAM

FIRM
FLOOD INSURANCE RATE MAP

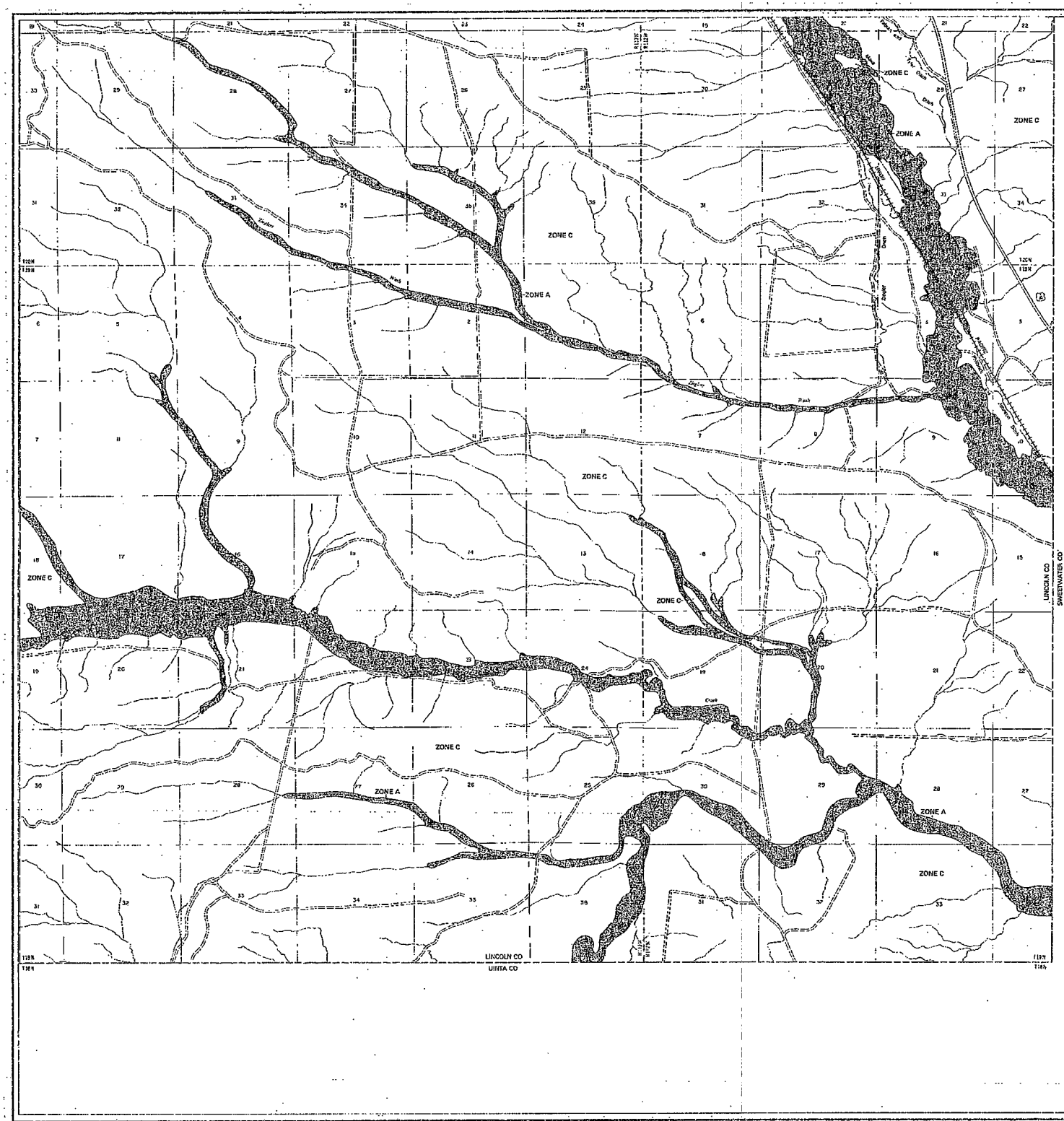
LINCOLN COUNTY, WYOMING
(UNINCORPORATED AREAS)

PANEL 1150 OF 1275
(SEE MAP INDEX FOR PANELS NOT PRINTED)

COMMUNITY-PANEL NUMBER
560032 1150 B

EFFECTIVE DATE:
FEBRUARY 15, 1980

U.S. DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT
FEDERAL INSURANCE ADMINISTRATION



KEY TO MAP

500-Year Flood Boundary

100-Year Flood Boundary

Zone Designations* With Date of 1st Difficiton e.g., 12/97/74

150-Year Flood Boundary

200-Year Flood Boundary

Base Flood Elevation Line With Elevation in Feet*

Base Flood Elevation in Feet Where Uniform Within Zone**

Elevation Reference Mark

River Mile

*Referenced to the National Geodetic Vertical Datum of 1929

*EXPLANATION OF ZONE DESIGNATIONS

ZONE	EXPLANATION
A	Areas of 100-year flood; base flood elevations and flood hazard factors not determined.
AO	Areas of 100-year shallow flooding where depths are between one (1) and three (3) feet; average depths of inundation are shown, but no flood hazard factors are determined.
AH	Areas of 100-year shallow flooding where depths are between one (1) and three (3) feet; base flood elevations are shown, but no flood hazard factors are determined.
A1-A30	Areas of 100-year flood; base flood elevations and flood hazard factors determined.
A99	Areas of 100-year flood to be protected by Federal flood protection system under construction; base flood elevations and flood hazard factors not determined.
B	Areas between limits of the 100-year flood and 500-year flood; or certain areas subject to 100-year flooding with average depths of less than one (1) foot or where the contributing drainage area is less than one square mile; or areas protected by levees from the base flood. (Medium shading)
C	Areas of minimal flooding. (No shading)
D	Areas of undetermined, but possible, flood hazards.
V	Areas of 100-year coastal flood with velocity (wave action); base flood elevations and flood hazard factors not determined.
V1-V30	Areas of 100-year coastal flood with velocity (wave action); base flood elevations and flood hazard factors determined.

NOTES TO USER

Certain areas within the special flood hazard areas (zones A and V) may be protected by flood control structures.

This map is for flood insurance purposes only; it does not necessarily show all areas subject to or free from flooding in the community or all potential flooding sources. Refer to the Flood Insurance Study report for this community for information on flooding sources not shown on this map.

For adjoining map panels, see panel layout index. To Map Panel 1.

INITIAL IDENTIFICATION:
JUNE 13, 1978

FLOOD HAZARD BOUNDARY MAP REVISIONS:

FLOOD INSURANCE RATE MAP EFFECTIVE:
FEBRUARY 15, 1980

FLOOD INSURANCE RATE MAP REVISIONS:

Refer to the FLOOD INSURANCE RATE MAP EFFECTIVE date shown on this map to determine when actuarial rates apply to structures in the zones where elevations or depths have been established.

To determine if flood insurance is available in this community, contact your insurance agent, or call the National Flood Insurance Program at (800) 638-6620, or (800) 424-8872.

APPROXIMATE SCALE
1000 0 2000 FEET

NATIONAL FLOOD INSURANCE PROGRAM

FIRM
FLOOD INSURANCE RATE MAP

LINCOLN COUNTY, WYOMING
(UNINCORPORATED AREAS)

PANEL 1275 OF 1275
(SEE MAP INDEX FOR PANELS NOT PRINTED)

COMMUNITY-PANEL NUMBER
560032 1275 B

EFFECTIVE DATE:
FEBRUARY 15, 1980

U.S. DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT
FEDERAL INSURANCE ADMINISTRATION

NOTES TO USERS

This map is for use in administering the National Flood Insurance Program. It does not necessarily identify all areas subject to flooding, particularly from local drainage sources of small size. The community map repository should be consulted for possible updated or additional flood hazard information.

To obtain more detailed information in areas where **Base Flood Elevations** (BFEs) and/or **floodways** have been determined, users are encouraged to consult the Flood Profiles and Floodway Data tables contained within the Flood Insurance Study (FIS) report that accompanies this FIRM. Users should be aware that BFEs shown on the FIRM represent rounded whole foot elevations. These BFEs are intended for flood insurance rating purposes only and should not be used as the sole source of flood elevation information. Accordingly, flood elevation data presented in the FIS should be utilized in conjunction with the FIRM for purposes of construction and/or floodplain management.

Coastal Base Flood Elevations (BFEs) shown on this map apply only landward of 0.0' National Geodetic Vertical Datum (NGVD). Users of this FIRM should be aware that coastal flood elevations may also be provided in the Summary of Stillwater Elevations table in the Flood Insurance Study report for this community. Elevations shown in the Summary of Stillwater Elevations table should be used for construction, and/or floodplain management purposes when they are higher than the elevations shown on this FIRM.

Boundaries of the **floodways** were computed at cross sections and interpolated between cross sections. The floodways were based on hydraulic considerations with regard to requirements of the National Flood Insurance Program. Floodway widths and other pertinent floodway data are provided in the Flood Insurance Study report for this jurisdiction.

Certain areas not in Special Flood Hazard Areas may be protected by **flood control structures**. Refer to Section 2.4 "Flood Protection Measures" of the Flood Insurance Study report for information on flood control structures in this jurisdiction.

The **projection** used in the preparation of this map is Universal Tranverse Mercator (UTM) Zone 12. The **horizontal datum** is NAD83, GRS1980 spheroid. Differences in datum, spheroid, projection or UTM zones used in the production of FIRMs for adjacent jurisdictions may result in slight positional differences in map features across jurisdiction boundaries. These differences do not affect the accuracy of the FIRM.

Flood elevations on this map are referenced to the National Geodetic Vertical Datum of 1929. These flood elevations must be compared to structure and ground elevations referenced to the same **vertical datum**. For information regarding conversion between the National Geodetic Vertical Datum of 1929 and the North American Vertical Datum of 1988, visit the National Geodetic Survey website at www.ngs.noaa.gov or contact the National Geodetic Survey at the following address:

Spatial Reference System Division
National Geodetic Survey, NOAA
Silver Spring Metro Center
1315 East-West Highway
Silver Spring, Maryland 20910
(301) 713 3191

To obtain current elevation, description, and/or location information for **bench marks** shown on this map, please contact the Information Services Branch of the National Geodetic Survey at (301) 713-3242, or visit their website at www.ngs.noaa.gov.

Base map information shown on this FIRM was provided in digital format by U.S. Geological Survey Digital Orthophoto Quadrangles produced at a scale of 1:12000 from photography dated 1991 or later.

Corporate limits shown on this map are based on the best data available at the time of publication. Because changes due to annexations or de-annexations may have occurred after this map was published, map users should contact appropriate community officials to verify current corporate limit locations.

Please refer to the separately printed Map Index for an overview map showing the layout of map panels for this jurisdiction.

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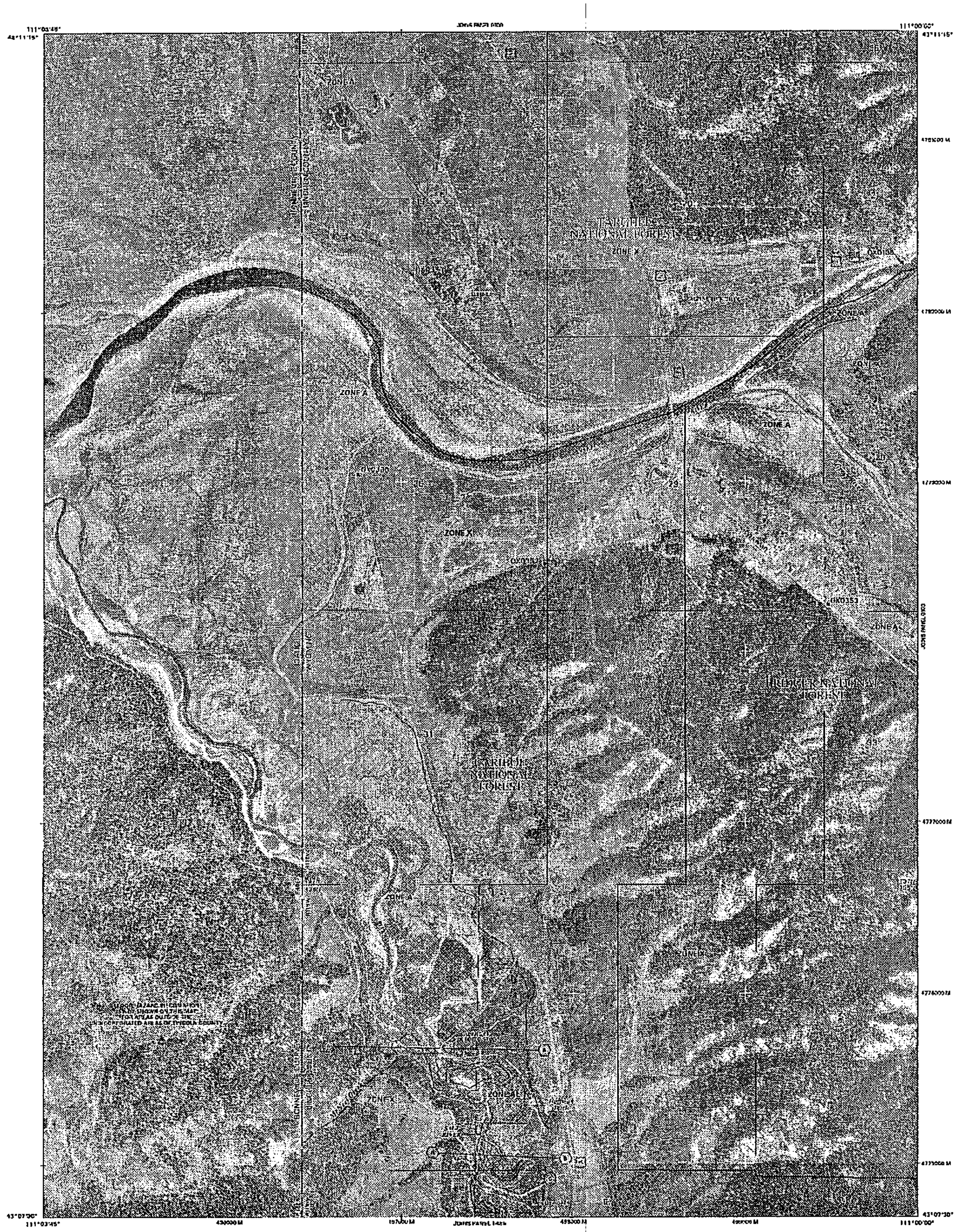
Phone: 800-358-9616
FAX: 800-358-9620
www.fema.gov/msc

If you have **questions** about this map or questions concerning the National Flood Insurance Program in general, please call 1-877-FEMA-MAP (1 877 336 2627) or visit the FEMA website at www.fema.gov.

This map reflects more detailed and up-to-date stream channel configurations than those shown on the previous FIRM for this jurisdiction. The floodplains and floodways that were transferred from the previous FIRM may have been adjusted to conform to these new stream channel configurations. As a result, the Flood Profiles and Floodway Data tables in the Flood Insurance Study report may reflect stream channel distances that differ from what is shown on this map.



LEGEND

SPECIAL FLOOD HAZARD AREAS SUBJECT TO INUNDATION BY THE 1% ANNUAL CHANCE FLOOD EVENT

The 1% annual chance flood (100-year flood), also known as the base flood, is the flood that has a 1% chance of being equaled or exceeded in any given year. The Special Flood Hazard Area is the area subject to flooding by the 1% annual chance flood. Areas of Special Flood Hazard include Zones A, AE, AH, AO, AR, A99, V, and VE. The Base Flood Elevation is the water surface elevation of the 1% annual chance flood.

ZONE A	No base flood elevations determined.
ZONE AE	Base flood elevations determined.
ZONE AH	Flood depths of 1 to 3 feet (usually areas of ponding); base flood elevations determined.
ZONE AO	Flood depths of 1 to 3 feet (usually sheet flow on sloping terrain); average depths determined. For areas of alluvial fan flooding, velocities also determined.
ZONE AR	Area of special flood hazard formerly protected from the 1% annual chance flood event by a flood control system that was subsequently decertified. Zone AR indicates that the former flood control system is being restored to provide protection from the 1% annual chance or greater flood event.
ZONE A99	Area to be protected from 1% annual chance flood event by a Federal flood protection system under construction; no base flood elevations determined.
ZONE V	Coastal flood zone with velocity hazard (wave action); no base flood elevations determined.
ZONE VE	Coastal flood zone with velocity hazard (wave action); base flood elevations determined.

FLOODWAY AREAS IN ZONE AE

The floodway is the channel of a stream plus any adjacent floodplain areas that must be kept free of encroachment so that the 1% annual chance flood can be carried without substantial increases in flood heights.

OTHER FLOOD AREAS

ZONE X	Areas of 0.2% annual chance flood; areas of 1% annual chance flood with average depths of less than 1 foot or with drainage areas less than 1 square mile; and areas protected by levees from 1% annual chance flood.

OTHER AREAS

ZONE X	Areas determined to be outside the 0.2% annual chance floodplain.
ZONE D	Areas in which flood hazards are undetermined, but possible.

COASTAL BARRIER RESOURCES SYSTEM (CBRS) AREAS

OTHERWISE PROTECTED AREAS (OPAs)

CBRS areas and OPAs are normally located within or adjacent to Special Flood Hazard Areas.

	Floodplain Boundary
	Floodway Boundary
	Zone D Boundary
	CBRS and OPA Boundary
	Boundary dividing Special Flood Hazard Areas of different Base Flood Elevations, flood depths or velocities.
~~513~~~~	Base Flood Elevation line and value; elevation in feet*
(EL 987)	Base Flood Elevation value where uniform within zone; elevation in feet*

*Referenced to the National Geodetic Vertical Datum of 1929

(A)——(A)	Cross Section Line
(23)——(23)	Transect Line
97°07'30", 32°22'30"	Geographic coordinates referenced to the North American Datum of 1983 (NAD 83)
4276000M	1000-meter Universal Transverse Mercator grid values, zone 12
600000 FT	5000-foot grid ticks
DX5510 ×	Bench mark (see explanation in Notes to Users section of this FIRM panel)
• M1.5	River Mile

MAP REPOSITORY

Lincoln County, Planning Department, [illegible], Kemmerer, Wyoming, 83101
(Maps available for reference only, not for distribution.)

INITIAL IDENTIFICATION

JUNE 13, 1978

FLOOD HAZARD BOUNDARY MAP REVISIONS

None

FLOOD INSURANCE RATE MAP EFFECTIVE

FEBRUARY 15, 1980

FLOOD INSURANCE RATE MAP REVISIONS

June 17, 2003: to add base flood elevations, to add special flood hazard areas, to change special flood hazard areas, to change zone designations, to update map format, and to reflect updated topographic information.

To determine if flood insurance is available in this community, contact your insurance agent or call the National Flood Insurance Program at [illegible].

MAP SCALE 1" = 1000'

500 0 1000 2000 FEET

300 0 300 600 METERS

NATIONAL FLOOD INSURANCE PROGRAM

PANEL 1370C

FIRM

FLOOD INSURANCE RATE MAP

LINCOLN COUNTY,
WYOMING
(UNINCORPORATED AREAS)

PANEL 1370 OF 3800

(SEE MAP INDEX FOR FIRM PANEL LAYOUT)

CONTAINS:

COMMUNITY	NUMBER	PANEL	SUFFIX
LINCOLN COUNTY, UNINCORPORATED AREAS	[illegible]	[illegible]	[illegible]

[illegible]

MAP NUMBER
5600321370C

MAP REVISED:
JUNE 17, 2003

Federal Emergency Management Agency

NOTES TO USERS

This map is for use in administering the National Flood Insurance Program. It does not necessarily identify all areas subject to flooding, particularly from local drainage sources of small size. The community map repository should be consulted for possible updated or additional flood hazard information.

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Coastal Base Flood Elevations (BFEs) shown on this map apply only land ward of 0.0' National Geodetic Vertical Datum (NGVD). Users of this FIRM should be aware that coastal flood elevations may also be provided in the Summary of Stillwater Elevations table in the Flood Insurance Study report for this community. Elevations shown in the Summary of Stillwater Elevations table should be used for construction, and/or floodplain management purposes when they are higher than the elevations shown on this FIRM.

Boundaries of the floodways were computed at cross sections and interpolated between cross sections. The floodways were based on hydraulic considerations with regard to requirements of the National Flood Insurance Program. Floodway widths and other pertinent floodway data are provided in the Flood Insurance Study report for this jurisdiction.

Certain areas not in Special Flood Hazard Areas may be protected by flood control structures. Refer to Section 2.4 "Flood Protection Measures" of the Flood Insurance Study report for information on flood control structures in this jurisdiction.

The projection used in the preparation of this map was Universal Transverse Mercator (UTM) Zone 12. The horizontal datum was NAD83, GRS1980 spheroid. Differences in datum, spheroid, projection or UTM zones used in the production of FIRMs for adjacent jurisdictions may result in slight positional differences in map features across jurisdiction boundaries. These differences do not affect the accuracy of this FIRM.

Flood elevations on this map are referenced to the National Geodetic Vertical Datum of 1929. These flood elevations must be compared to structure and ground elevations referenced to the same vertical datum. For information regarding conversion between the National Geodetic Vertical Datum of 1929 and the North American Vertical Datum of 1988, visit the National Geodetic Survey website at www.ngs.noaa.gov or contact the National Geodetic Survey at the following address:

Spatial Reference System Division
National Geodetic Survey, NOAA
Silver Spring Metro Center
1315 East-West Highway
Silver Spring, Maryland 20910
(301) 713-3191

To obtain current elevation, description, and/or location information for benchmarks shown on this map, please contact the Information Services Branch of the National Geodetic Survey at (301) 713-3242, or visit their website at www.ngs.noaa.gov.

Base map information shown on this FIRM was provided in digital format by U.S. Geological Survey Digital Orthophoto Quadrangles produced at a scale of 1:12000 from photography dated 1991 or later.

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FAX: 703-358-5620
www.fema.gov/msc

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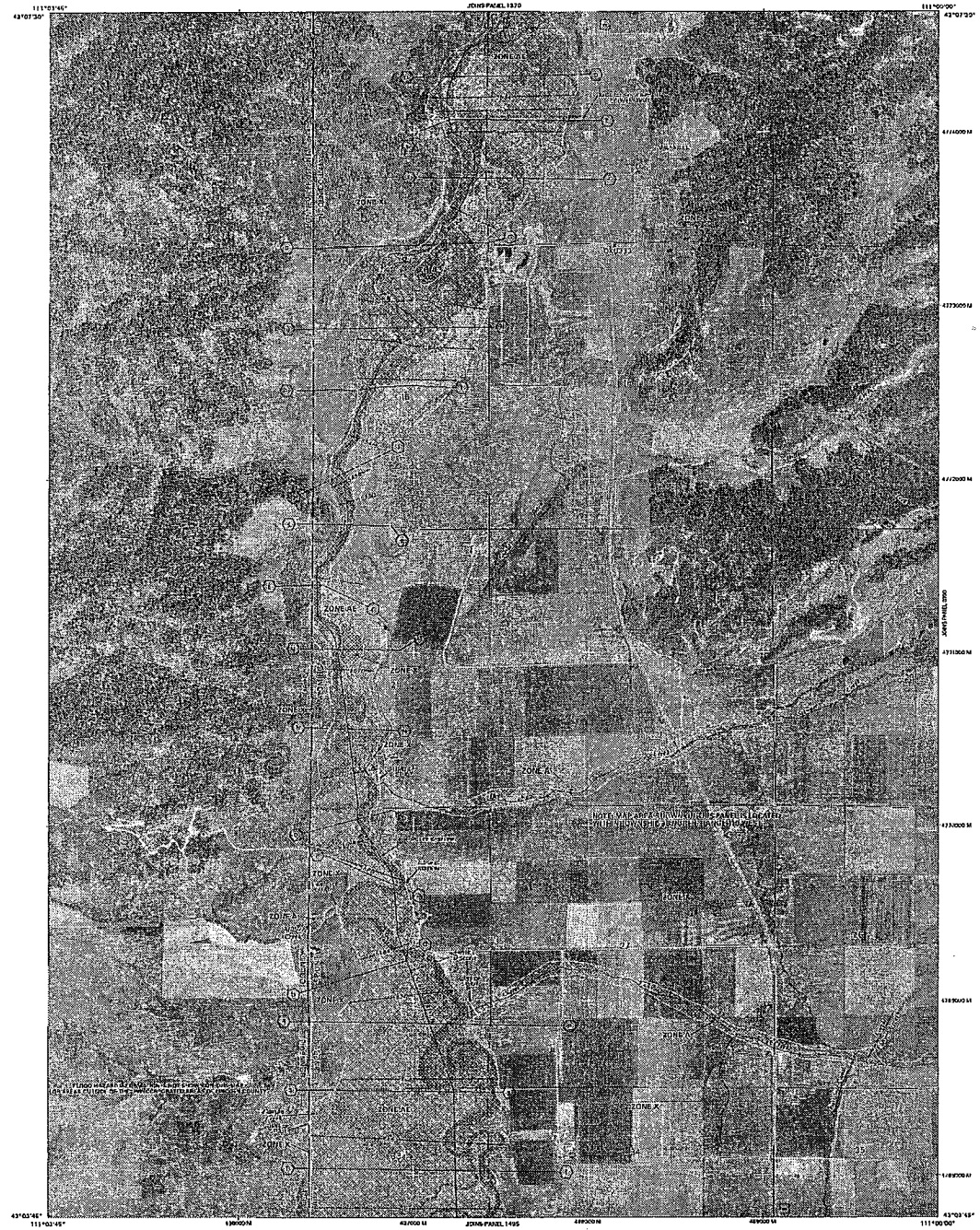

LEGEND

SPECIAL FLOOD HAZARD AREAS SUBJECT TO INUNDATION BY THE 1% ANNUAL CHANCE FLOOD EVENT

The 1% annual chance flood (100-year flood), also known as the base flood, is the flood that has a 1% chance of being equaled or exceeded in any given year. The Special Flood Hazard Area is the area subject to flooding by the 1% annual chance flood. Areas of Special Flood Hazard include Zones A, AE, AH, AO, AR, A99, V, and VE. The Base Flood Elevation is the water surface elevation of the 1% annual chance flood.

ZONE A — No base flood elevations determined.

ZONE AE — Base flood elevations determined.

ZONE AH — Flood depths of 1 to 3 feet (usually areas of ponding); base flood elevations determined.

ZONE AO — Flood depths of 1 to 3 feet (usually sheet flow on sloping terrain); average depths determined. For areas of alluvial fan flooding, velocities also determined.

ZONE AR — Area of special flood hazard formerly protected from the 1% annual chance flood event by a flood control system that was subsequently decertified. Zone AR indicates that the former flood control system is being restored to provide protection from the 1% annual chance or greater flood event.

ZONE A99 — Area to be protected from 1% annual chance flood event by a Federal flood protection system under construction; no base flood elevations determined.

ZONE V — Coastal flood zone with velocity hazard (wave action); no base flood elevations determined.

ZONE VE — Coastal flood zone with velocity hazard (wave action); base flood elevations determined.

FLOODWAY AREAS IN ZONE AE

The floodway is the channel of a stream plus any adjacent floodplain areas that must be kept free of encroachment so that the 1% annual chance flood can be carried without substantial increases in flood heights.

OTHER FLOOD AREAS

ZONE X — Areas of 0.2% annual chance flood; areas of 1% annual chance flood with average depths of less than 1 foot or with drainage areas less than 1 square mile; and areas protected by levees from 1% annual chance flood.

OTHER AREAS

ZONE X — Areas determined to be outside the 0.2% annual chance floodplain.

ZONE D — Areas in which flood hazards are undetermined, but possible.

COASTAL BARRIER RESOURCES SYSTEM (CBRS) AREAS

OTHERWISE PROTECTED AREAS (OPAs)

CBRS areas and OPAs are normally located within or adjacent to Special Flood Hazard Areas.

- Floodplain Boundary
- Floodway Boundary
- Zone D Boundary
- CBRS and OPA Boundary
- Boundary dividing Special Flood Hazard Areas of different Base Flood Elevations, flood depths or flood velocities.
- 513 — Base Flood Elevation line and value; elevation in feet*
- (EL 987) — Base Flood Elevation value where uniform within zone; elevation in feet*

*Referenced to the National Geodetic Vertical Datum of 1929

- (A)—(A) — Cross Section Line
- (23)—(23) — Transect Line
- 97°07'30", 32°22'30" — Geographic coordinates referenced to the North American Datum of 1983 (NAD 83)
- 4276000M — 1000-meter Universal Transverse Mercator grid values, zone 12
- 600000 FT — 5000-foot grid ticks
- DX5510 X — Bench mark (see explanation in Notes to Users section of this FIRM panel)
- M1.5 — River Mile

MAP REPOSITORY

Lincoln County, Planning Department, 520 Topaz Street, Kemmerer, Wyoming, 83101
(Maps available for reference only, not for distribution.)

INITIAL IDENTIFICATION
JUNE 13, 1979

FLOOD HAZARD BOUNDARY MAP REVISIONS
None

FLOOD INSURANCE RATE MAP EFFECTIVE
FEBRUARY 18, 1986

FLOOD INSURANCE RATE MAP REVISIONS
June 17, 2003: to add base flood elevations, to add special flood hazard areas, to change special flood hazard areas, to change zone designations, to update map format, and to reflect updated topographic information.

To determine if flood insurance is available in this community, contact your insurance agent or call the National Flood Insurance Program at (800) 638-6620.

MAP SCALE 1" = 1000'

500 0 1000 2000 FEET
300 0 300 600 METERS

PANEL 1485C

FIRM
FLOOD INSURANCE RATE MAP
LINCOLN COUNTY, WYOMING (UNINCORPORATED AREAS)

PANEL 1485 OF 3800

SEE MAP INDEX FOR FIRM PANEL LAYOUT

CONTAINS:

COMMUNITY	NUMBER	PANEL	SUFFIX
LINCOLN COUNTY, UNINCORPORATED AREAS	560032	1485	C

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 property.

MAP NUMBER
56003C1485C

MAP REVISED:
JUNE 17, 2003

Federal Emergency Management Agency

Plotted 03-01-21.14:00:15.Tue by tsaoomaz

NOTES TO USERS

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Coastal Base Flood Elevation (BFEs) shown on this map apply only landward of 0.0' National Geodetic Vertical Datum (NGVD). Users of this FIRM should be aware that coastal flood elevations may also be provided in the Summary of Stillwater Elevations table in the Flood Insurance Study report for this community. Elevations shown in the Summary of Stillwater Elevations table should be used for construction, and/or floodplain management purposes when they are higher than the elevations shown on this FIRM.

Boundaries of the **floodways** were computed at cross sections and interpolated between cross sections. The floodways were based on hydraulic considerations with regard to requirements of the National Flood Insurance Program. Floodway widths and other pertinent floodway data are provided in the Flood Insurance Study report for this jurisdiction.

Certain areas not in Special Flood Hazard Areas may be protected by **flood control structures**. Refer to Section 2.4 "Flood Protection Measures" of the Flood Insurance Study report for information on flood control structures in this jurisdiction.

The **projection** used in the preparation of this map is Universal Transverse Mercator (UTM) Zone 12. The **horizontal datum** is NAD83, GRS1980 spheroid. Differences in datum, spheroid, projection or UTM zones used in the production of FIRMs for adjacent jurisdictions may result in slight positional differences in map features across jurisdiction boundaries. These differences do not affect the accuracy of the FIRM.

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Spatial Reference System Division
National Geodetic Survey, NOAA
Silver Spring Metro Center
1315 East-West Highway
Silver Spring, Maryland 20910
(301) 713-3191

To obtain current elevation, description, and/or location information for bench marks shown on this map, please contact the Information Services Branch of the National Geodetic Survey at (301) 713-3242, or visit their website at www.ngs.noaa.gov.

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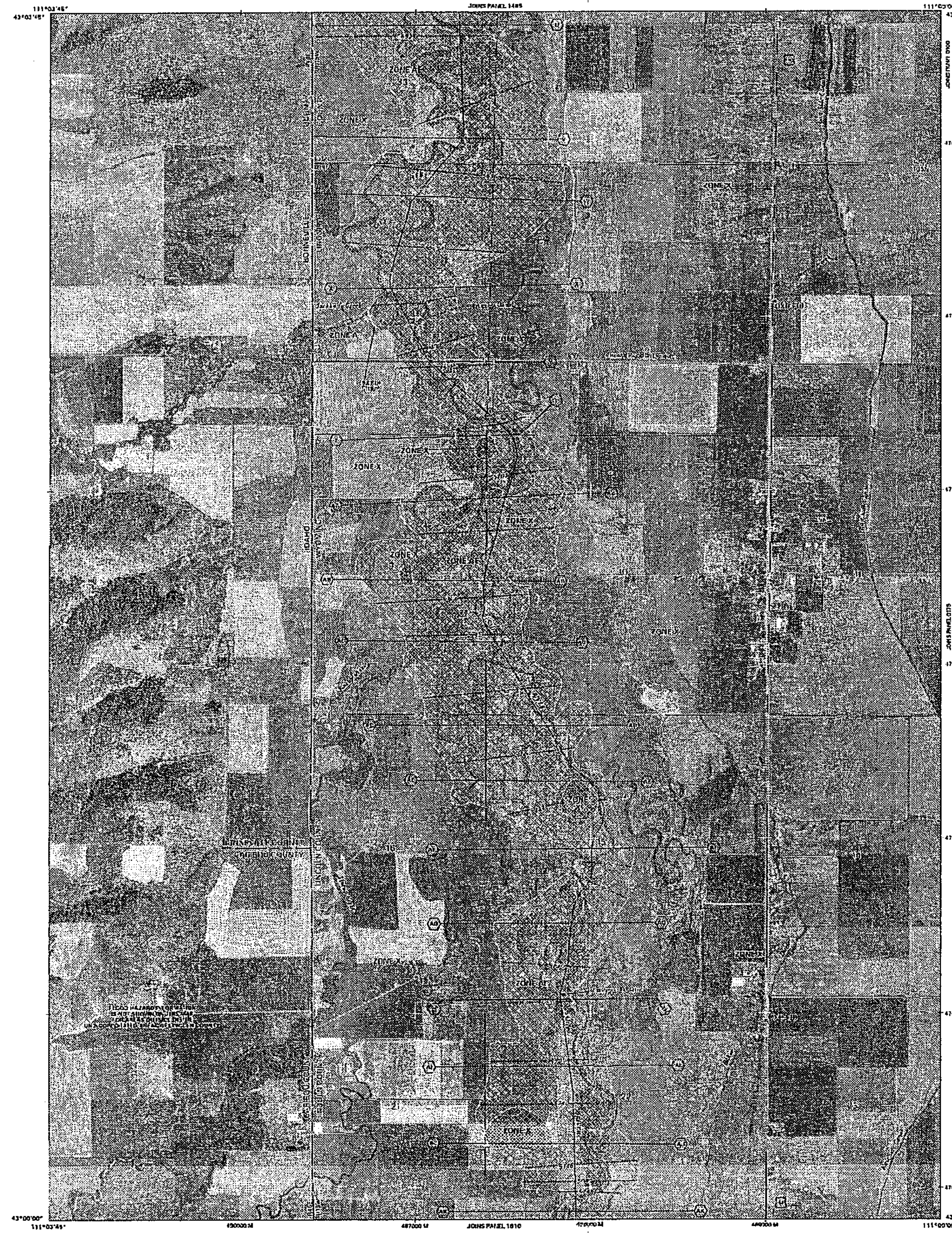

LEGEND

SPECIAL FLOOD HAZARD AREAS SUBJECT TO INUNDATION BY THE 1% ANNUAL CHANCE FLOOD EVENT

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ZONE A	No base flood elevations determined.
ZONE AE	Base flood elevations determined.
ZONE AH	Flood depths of 1 to 3 feet (usually areas of ponding); base flood elevations determined.
ZONE AO	Flood depths of 1 to 3 feet (usually sheet flow on sloping terrain); average depths determined. For areas of alluvial fan flooding, velocities also determined.
ZONE AR	Area of special flood hazard formerly protected from the 1% annual chance flood event by a flood control system that was subsequently decertified. Zone AR indicates that the former flood control system is being restored to provide protection from the 1% annual chance or greater flood event.
ZONE A99	Area to be protected from 1% annual chance flood event by a Federal flood protection system under construction; no base flood elevations determined.
ZONE V	Coastal flood zone with velocity hazard (wave action); no base flood elevations determined.
ZONE VE	Coastal flood zone with velocity hazard (wave action); base flood elevations determined.

FLOODWAY AREAS IN ZONE AE

The floodway is the channel of a stream plus any adjacent floodplain areas that must be kept free of encroachment so that the 1% annual chance flood can be carried without substantial increases in flood heights.

OTHER FLOOD AREAS

ZONE X	Areas of 0.2% annual chance flood; areas of 1% annual chance flood with average depths of less than 1 foot or with drainage areas less than 1 square mile; and areas protected by levees from 1% annual chance flood.

OTHER AREAS

ZONE X	Areas determined to be outside the 0.2% annual chance floodplain.
ZONE D	Areas in which flood hazards are undetermined, but possible.

COASTAL BARRIER RESOURCES SYSTEM (CBRS) AREAS

OTHERWISE PROTECTED AREAS (OPAs)

CBRS areas and OPAs are normally located within or adjacent to Special Flood Hazard Areas.

	Floodplain Boundary
	Floodway Boundary
	Zone D Boundary
	CBRS and OPA Boundary
	Boundary dividing Special Flood Hazard Areas of different Base Flood Elevations, flood depths or velocities.
~~ 513 ~~~~	Base Flood Elevation line and value; elevation in feet*
(EL 987)	Base Flood Elevation value where uniform within zone; elevation in feet*

*Referenced to the National Geodetic Vertical Datum of 1929

(A)——(A)	Cross Section Line
(23)——(23)	Transect Line
97°07'30", 32°22'30"	Geographic coordinates referenced to the North American Datum of 1983 (NAD 83)
4276000M	1000-meter Universal Transverse Mercator grid values, zone 12
600000 FT	5000-foot grid ticks
DX5510 ×	Bench mark (see explanation in Notes to Users section of this FIRM panel)
• M1.5	River Mile

MAP REPOSITORY
Lincoln County, Planning Department, 520 Topaz Street, Kemmerer, Wyoming 83101
(Maps available for reference only, not for distribution.)

INITIAL IDENTIFICATION
JUNE 13, 1978

FLOOD HAZARD BOUNDARY MAP REVISIONS
None

FLOOD INSURANCE RATE MAP EFFECTIVE
FEBRUARY 16, 1990

FLOOD INSURANCE RATE MAP REVISIONS
June 17, 2003: to add base flood elevations, to add special flood hazard areas, to change special flood hazard areas, to change zone designations, to update map format, and to reflect updated topographic information.

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MAP SCALE 1" = 1000'

500 0 1000 2000 FEET

300 0 300 600 METERS

PANEL 1495C

FIRM
FLOOD INSURANCE RATE MAP
LINCOLN COUNTY,
WYOMING
(UNINCORPORATED AREAS)

PANEL 1495 OF 3600

(SEE MAP INDEX FOR FIRM PANEL LAYOUT)

CONTAINS:

COMMUNITY	NUMBER	PANEL	SUFFIX
LINCOLN COUNTY, UNINCORPORATED AREAS	560032	1495	C

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
56023C1495C

MAP REVISED:
JUNE 17, 2003

Federal Emergency Management Agency

NOTES TO USERS

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Boundaries of the floodways were computed at cross sections and interpolated between cross sections. The floodways were based on hydraulic considerations with regard to requirements of the National Flood Insurance Program. Floodway widths and other pertinent floodway data are provided in the Flood Insurance Study report for this jurisdiction.

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1315 East-West Highway
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(301) 713-3191

To obtain current elevation, description, and/or location information for **bench marks** shown on this map, please contact the Information Services Branch of the National Geodetic Survey at (301) 713-3242, or visit their website at www.ngs.noaa.gov.

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LEGEND

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ZONE A	No base flood elevations determined.
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ZONE AR	Area of special flood hazard formerly protected from the 1% annual chance flood event by a flood control system that was subsequently decertified. Zone AR indicates that the former flood control system is being restored to provide protection from the 1% annual chance or greater flood event.
ZONE A99	Area to be protected from 1% annual chance flood event by a Federal flood protection system under construction; no base flood elevations determined.
ZONE V	Coastal flood zone with velocity hazard (wave action); no base flood elevations determined.
ZONE VE	Coastal flood zone with velocity hazard (wave action); base flood elevations determined.

FLOODWAY AREAS IN ZONE AE

The floodway is the channel of a stream plus any adjacent floodplain areas that must be kept free of encroachment so that the 1% annual chance flood can be carried without substantial increases in flood heights.

OTHER FLOOD AREAS

ZONE X	Areas of 0.2% annual chance flood; areas of 1% annual chance flood with average depths of less than 1 foot or with drainage areas less than 1 square mile; and areas protected by levees from 1% annual chance flood.

OTHER AREAS

ZONE X	Areas determined to be outside the 0.2% annual chance floodplain.
ZONE D	Areas in which flood hazards are undetermined, but possible.

COASTAL BARRIER RESOURCES SYSTEM (CBRS) AREAS

OTHERWISE PROTECTED AREAS (OPAs)

CBRS areas and OPAs are normally located within or adjacent to Special Flood Hazard Areas.

	Floodplain Boundary
	Floodway Boundary
	Zone D Boundary
	CBRS and OPA Boundary
	Boundary dividing Special Flood Hazard Areas of different Base Flood Elevations, flood depths or velocities.
~~ 513 ~~~	Base Flood Elevation line and value, elevation in feet*
(EL 987)	Base Flood Elevation value where uniform within zone; elevation in feet*

*Referenced to the National Geodetic Vertical Datum of 1929

(A)——(A)	Cross Section Line
(23)——(23)	Transect Line
97°07'30", 32°22'30"	Geographic coordinates referenced to the North American Datum of 1983 (NAD 83)
4276000M	1000-meter Universal Transverse Mercator grid values, zone 12
600000 FT	5000-foot grid ticks
DX5510 ×	Bench mark (see explanation in Notes to Users section of this FIRM panel)
• M1.5	River Mile

MAP REPOSITORY

Lincoln County, Planning Department, 520 Topaz Street, Kemmerer, Wyoming 83101
(Maps available for reference only, not for distribution.)

INITIAL IDENTIFICATION
JUNE 13, 1978

FLOOD HAZARD BOUNDARY MAP REVISIONS
None

FLOOD INSURANCE RATE MAP EFFECTIVE
FEBRUARY 15, 1980

FLOOD INSURANCE RATE MAP REVISIONS

June 17, 2003: to add base flood elevations, to add special flood hazard areas, to change special flood hazard areas, to change zone designations, to update map format, and to reflect updated topographic information.

To determine if flood insurance is available in this community, contact your insurance agent or call the National Flood Insurance Program at (800) 638-6620.

MAP SCALE 1" = 1000'

500 0 1000 2000 FEET

300 0 300 600 METERS

PANEL 1610C

FIRM
FLOOD INSURANCE RATE MAP

LINCOLN COUNTY,
WYOMING
(UNINCORPORATED AREAS)

PANEL 1610 OF 3800

(SEE MAP INDEX FOR FIRM PANEL LAYOUT)

CONTAINS:

COMMUNITY	NUMBER	PANEL	SUFFIX
LINCOLN COUNTY, UNINCORPORATED AREAS	[illegible]	[illegible]	C

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 5600321610C

MAP REVISED: JUNE 17, 2003

Federal Emergency Management Agency

Plotted 03-01-21.13:19:50.Tue by tsanomiz

NOTES TO USERS

This map is for use in administering the National Flood Insurance Program. It does not necessarily identify all areas subject to flooding, particularly from local drainage sources of small size. The community map repository should be consulted for possible updated or additional flood hazard information.

To obtain more detailed information in areas where Base Flood Elevations (BFEs) and/or floodways have been determined, users are encouraged to consult the Flood Profiles and Floodway Data tables contained within the Flood Insurance Study (FIS) report that accompanies this FIRM. Users should be aware that BFEs shown on the FIRM represent rounded whole-foot elevations. These BFEs are intended for flood insurance rating purposes only and should not be used as the sole source of flood elevation information. Accordingly, flood elevation data presented in the FIS should be utilized in conjunction with the FIRM for purposes of construction and/or floodplain management.

Coastal Base Flood Elevations (BFEs) shown on this map apply only landward of 0.0' National Geodetic Vertical Datum (NGVD). Users of this FIRM should be aware that coastal flood elevations may also be provided in the Summary of Stillwater Elevations table in the Flood Insurance Study report for this community. Elevations shown in the Summary of Stillwater Elevations table should be used for construction, and/or floodplain management purposes when they are higher than the elevations shown on this FIRM.

Boundaries of the **floodways** were computed at cross sections and interpolated between cross sections. The floodways were based on hydraulic considerations with regard to requirements of the National Flood Insurance Program. Floodway widths and other pertinent floodway data are provided in the Flood Insurance Study report for this jurisdiction.

Certain areas not in Special Flood Hazard Areas may be protected by flood control **structures**. Refer to Section 2.4 "Flood Protection Measures" of the Flood Insurance Study report for information on flood control structures in this jurisdiction.

The **projection** used in the preparation of this map is Universal Transverse Mercator (UTM) Zone 12. The **horizontal datum** is NAD83, GRS1980 spheroid. Differences in datum, spheroid, projection or UTM zones used in the production of FIRMs for adjacent jurisdictions may result in slight positional differences in map features across jurisdiction boundaries. These differences do not affect the accuracy of this FIRM.

Flood elevations on this map are referenced to the National Geodetic Vertical Datum of 1929. These flood elevations must be compared to structure and ground elevations referenced to the same vertical datum. For information regarding conversion between the National Geodetic Vertical Datum of 1929 and the North American Vertical Datum of 1988, visit the National Geodetic Survey website at www.ngs.noaa.gov or contact the National Geodetic Survey at the following address:

Spatial Reference System Division
National Geodetic Survey, NOAA
Silver Spring Metro Center
1315 East-West Highway
Silver Spring, Maryland 20910
(301) 713-3191

To obtain current elevation, description, and/or location information for bench marks shown on this map, please contact the Information Services Branch of the National Geodetic Survey at (301) 713-3242, or visit their website at www.ngs.noaa.gov.

Base map information shown on this FIRM was provided in digital format by U.S. Geological Survey Digital Orthophoto Quadrangles produced at a scale of 1:12000 from photography dated 1991 or later.

Corporate limits shown on this map are based on the best data available at the time of publication. Because changes due to annexations or de-annexations may have occurred after this map was published, map users should contact appropriate community officials to verify current corporate limit locations.

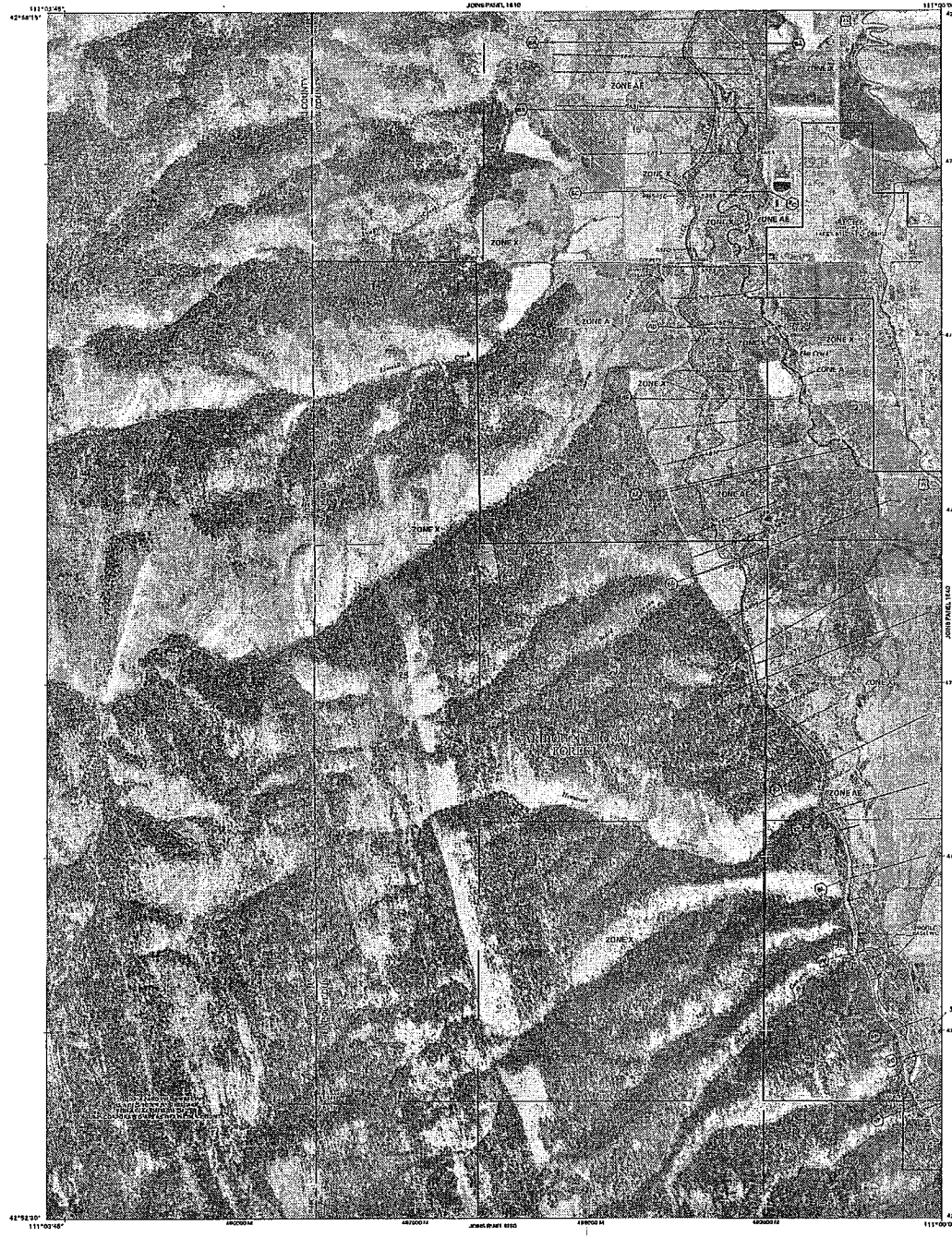
Please refer to the separately printed **Map Index** for an overview map showing the layout of map panels for this jurisdiction.

An accompanying Flood Insurance Study report, Letters of Map Revision or Letters of Map Amendment existing portions of this panel, and digital versions of this PANEL may be available. Contact the **FEMA Map Service Center** at the following phone numbers and Internet address for information on all related products available from FEMA:

Phone: 800-358-9616
FAX: 800-358-9620
www.fema.gov/msc

If you have **questions about** this map or questions concerning the National Flood Insurance Program in general, please call 1-877-FEMA-MAP (1-877-336-2627) or visit the FEMA website at www.fema.gov.

This map reflects more detailed and up-to-date stream channel configurations than those shown on the previous FIRM for this jurisdiction. The floodplains and floodways that were transferred from the previous FIRM may have been adjusted to conform to these new stream channel configurations. As a result, the Flood Profiles and Floodway Data tables in the Flood Insurance Study report may reflect stream channel distances that differ from what is shown on this map.



LEGEND

SPECIAL FLOOD HAZARD AREAS SUBJECT TO INUNDATION BY THE 1% ANNUAL CHANCE FLOOD EVENT

The 1% annual chance flood (100-year flood), also known as the base flood, is the flood that has a 1% chance of being equaled or exceeded in any given year. The Special Flood Hazard Area is the area subject to flooding by the 1% annual chance flood. Areas of Special Flood Hazard include Zones A, AE, AH, AO, AR, A99, V, and VE. The Base Flood Elevation is the water surface elevation of the 1% annual chance flood.

ZONE A	No base flood elevations determined.
ZONE AE	Base flood elevations determined.
ZONE AH	Flood depths of 1 to 3 feet (usually areas of ponding); base flood elevations determined.
ZONE AO	Flood depths of 1 to 3 feet (usually sheet flow on sloping terrain); average depths determined. For areas of alluvial fan flooding, velocities also determined.
ZONE AR	Area of special flood hazard formerly protected from the 1% annual chance flood event by a flood control system that was subsequently decertified. Zone AR indicates that the former flood control system is being restored to provide protection from the 1% annual chance or greater flood event.
ZONE A99	Area to be protected from 1% annual chance flood event by a Federal flood protection system under construction; no base flood elevations determined.
ZONE V	Coastal flood zone with velocity hazard (wave action); no base flood elevations determined.
ZONE VE	Coastal flood zone with velocity hazard (wave action); base flood elevations determined.

FLOODWAY AREAS IN ZONE AE

The floodway is the channel of a stream plus any adjacent floodplain areas that must be kept free of encroachment so that the 1% annual chance flood can be carried without substantial increases in flood heights.

OTHER FLOOD AREAS

ZONE X	Areas of 0.2% annual chance flood; areas of 1% annual chance flood with average depths of less than 1 foot or with drainage areas less than 1 square mile; and areas protected by levees from 1% annual chance flood.

OTHER AREAS

ZONE X	Areas determined to be outside the 0.2% annual chance floodplain.
ZONE D	Areas in which flood hazards are undetermined, but possible.

COASTAL BARRIER RESOURCES SYSTEM (CBRS) AREAS

OTHERWISE PROTECTED AREAS (OPAs)

CBRS areas and OPAs are normally located within or adjacent to Special Flood Hazard Areas.

	Floodplain Boundary
	Floodway Boundary
	Zone D Boundary
	CBRS and OPA Boundary
	Boundary dividing Special Flood Hazard Areas of different Base Flood Elevations, flood depths or velocities.
513	Base Flood Elevation line and value; elevation in feet*
EL 987)	Base Flood Elevation value where uniform within zone; elevation in feet*

*Referenced to the National Geodetic Vertical Datum of 1929

A — A	Cross Section Line
23 — 23	Transect Line
97°07'30", 32°22'30"	Geographic coordinates referenced to the North American Datum of 1983 (NAD 83)
4275000mN	1000-meter Universal Transverse Mercator grid values, zone 12
500000 FT	5000-foot grid ticks
DX5810 ×	Bench mark (see explanation in Notes to Users section of this FIRM panel)
M1.5	River Mile

MAP REPOSITORY
Lincoln County, Planning Department, 520 Topaz Street, Kemmerer, Wyoming, 83101
(Maps available for reference only, not for sale or loan.)

INITIAL IDENTIFICATION
JUNE 15, 1979
FLOOD HAZARD BOUNDARY MAP REVISIONS
None
FLOOD INSURANCE RATE MAP EFFECTIVE
FEBRUARY 15, 1979
FLOOD INSURANCE RATE MAP REVISIONS
June 17, 2003: to add base flood elevations, to add special flood hazard areas, to change special flood hazard areas, to change zone designations, to update map format, and to reflect updated topographic information.

To determine if flood insurance is available in this community, contact your insurance agent or call the National Flood Insurance Program at (800) 638-6620.

MAP SCALE 1" = 1000'
500 0 1000 2000 FEET
300 0 300 600 METERS

PANEL 1620C

FIRM
FLOOD INSURANCE RATE MAP
LINCOLN COUNTY, WYOMING (UNINCORPORATED AREAS)

PANEL 1620 OF 3800

(SEE MAP INDEX FOR ISSUE PANEL LAYOUT)

CONTAINS

COMMUNITY	NUMBER	PANEL	SUFFIX
LINCOLN COUNTY, UNINCORPORATED AREAS	560031	1620	C

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
56003C1620C

MAP REVISED:
JUNE 17, 2003

Federal Emergency Management Agency

NOTES TO USERS

This map is for use in administering the National Flood Insurance Program. It does not necessarily identify all areas subject to flooding, particularly from local drainage sources of small size. The community map repository should be consulted for possible updated or additional flood hazard information.

To obtain more detailed information in areas where **Base Flood Elevations** (BFEs) and/or **floodways** have been determined, users are encouraged to consult the Flood Profiles and Floodway Data tables contained within the Flood Insurance Study (FIS) report that accompanies this FIRM. Users should be aware that BFEs shown on the FIRM represent rounded whole-foot elevations. These BFEs are intended for flood insurance rating purposes only and should not be used as the sole source of flood elevation information. Accordingly, flood elevation data presented in the FIS should be utilized in conjunction with the FIRM for purposes of construction and/or floodplain management.

Coastal Base Flood Elevations (BFEs) shown on this map apply only landward of 0.0' National Geodetic Vertical Datum (NGVD). Users of this FIRM should be aware that coastal flood elevations may also be provided in the Summary of Stillwater Elevations table in the Flood Insurance Study report for this community. Elevations shown in the Summary of Stillwater Elevations table should be used for construction, and/or floodplain management purposes when they are higher than the elevations shown on this FIRM.

Boundaries of the **floodways** were computed at cross sections and interpolated between cross sections. The floodways were based on hydraulic considerations with regard to requirements of the National Flood Insurance Program. Floodway widths and other pertinent floodway data are provided in the Flood Insurance Study report for this jurisdiction.

Certain areas not in Special Flood Hazard Areas may be protected by **flood control structures**. Refer to Section 2.4 "Flood Protection Measures" of the Flood Insurance Study report for information on flood control structures in this jurisdiction.

The **projection** used in the preparation of this map is Universal Transverse Mercator (UTM) Zone 12. The horizontal datum is NAD83, GRS1980 spheroid. Differences in datum, spheroid, projection or UTM zones used in the production of FIRMs for adjacent jurisdictions may result in slight positional differences in map features across jurisdiction boundaries. These differences do not affect the accuracy of this FIRM.

Flood elevations on this map are referenced to the National Geodetic Vertical Datum of 1929. These flood elevations must be compared to structure and ground elevations referenced to the same vertical datum. For information regarding conversion between the National Geodetic Vertical Datum of 1929 and the North American Vertical Datum of 1988, visit the National Geodetic Survey website at www.ngs.noaa.gov or contact the National Geodetic Survey at the following address:

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Silver Spring Metro Center
1315 East-West Highway
Silver Spring, Maryland 20910
(301) 713-3191

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Please refer to the separately printed **Map Index** for an overview map showing the layout of map panels for this jurisdiction.

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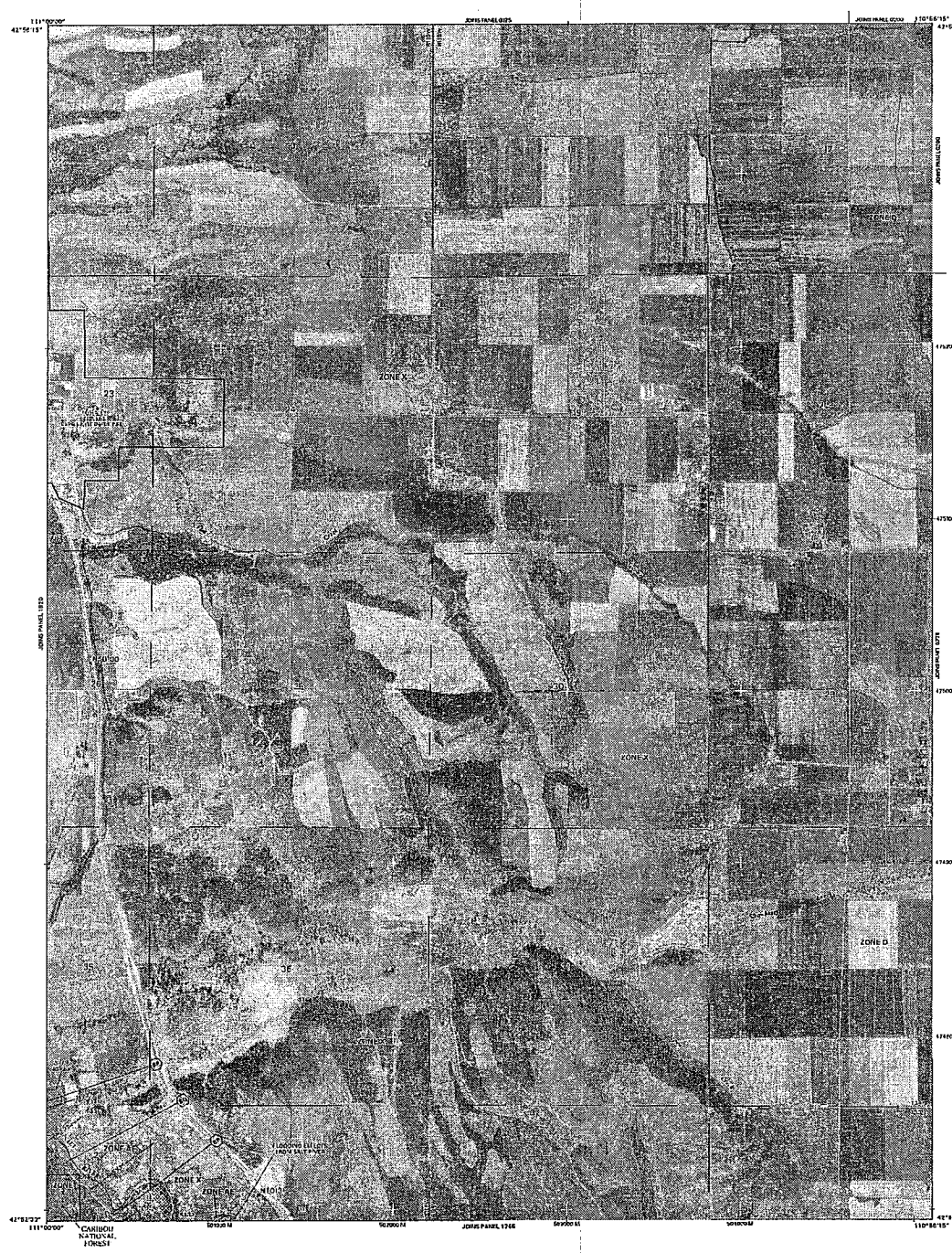
Phone: 800-358-9616
FAX: 703 358 9620
www.fema.gov/msc

If you have questions about this map or questions concerning the National Flood Insurance Program in general, please call 1-877-FEMA-MAP (1-877-336-2627) or visit the FEMA website at www.fema.gov.

This map reflects more detailed and up-to-date stream channel configurations than those shown on the previous FIRM for this jurisdiction. The floodplains and floodways that were transferred from the previous FIRM may have been adjusted to conform to these new stream channel configurations. As a result, the Flood Profiles and Floodway Data tables in the Flood Insurance Study report may reflect stream channel distances that differ from what is shown on this map.



LEGEND

SPECIAL FLOOD HAZARD AREAS SUBJECT TO INFLUNDATION BY THE 1% ANNUAL CHANCE FLOOD EVENT

The 1% annual chance flood (100-year flood), also known as the base flood, is the flood that has a 1% chance of being equaled or exceeded in any given year. The Special Flood Hazard Area is the area subject to flooding by the 1% annual chance flood. Areas of Special Flood Hazard include Zones A, AE, AH, AO, AR, A99, V, and VE. The Base Flood Elevation is the water surface elevation of the 1% annual chance flood.

ZONE A — No base flood elevations determined.

ZONE AE — Base flood elevations determined.

ZONE AH — Flood depths of 1 to 3 feet (usually areas of ponding); base flood elevations determined.

ZONE AO — Flood depths of 1 to 3 feet (usually sheet flow on sloping terrain); average depths determined. For areas of alluvial fan flooding, velocities also determined.

ZONE AR — Area of special flood hazard formerly protected from the 1% annual chance flood event by a flood control system that was subsequently decertified. Zone AR indicates that the former flood control system is being restored to provide protection from the 1% annual chance or greater flood event.

ZONE A99 — Area to be protected from 1% annual chance flood event by a Federal flood protection system under construction; no Base Flood elevations determined.

ZONE V — Coastal flood zone with velocity hazard (wave action); no base flood elevations determined.

ZONE VE — Coastal flood zone with velocity hazard (wave action); base flood elevations determined.

FLOODWAY AREAS IN ZONE AE

The floodway is the channel of a stream plus any adjacent floodplain areas that must be kept free of encroachment so that the 1% annual chance flood can be carried without substantial increases in flood heights.

OTHER FLOOD AREAS

ZONE X — Areas of 0.2% annual chance flood; areas of 1% annual chance flood with average depths of less than 1 foot or with drainage areas less than 1 square mile; and areas protected by levees from 1% annual chance flood.

OTHER AREAS

ZONE X — Areas determined to be outside the 0.2% annual chance floodplain.

ZONE D — Areas in which flood hazards are undetermined, but possible.

COASTAL BARRIER RESOURCES SYSTEM (CBRS) AREAS

OTHERWISE PROTECTED AREAS (OPAs)

CBRS areas and OPAs are normally located within or adjacent to Special Flood Hazard Areas.

- Floodplain Boundary
- Floodway Boundary
- Zone D Boundary
- CBRS and OPA Boundary
- Boundary dividing Special Flood Hazard Areas of different Base Flood Elevations, flood depths or flood velocities.
- 513 — Base Flood Elevation line and value; elevation in feet*
- (EL 987) — Base Flood Elevation value where uniform within zone; elevation in feet*

*Referenced to the National Geodetic Vertical Datum of 1929

- (A) — (A) — Cross Section Line
- (23) — (23) — Transect Line
- 97°07'30", 32°22'30" — Geographic coordinates referenced to the North American Datum of 1983 (NAD 83)
- 4327000 M — 1000-meter Universal Transverse Mercator grid values, zone 12
- 500000 FT — 5000-foot grid ticks
- DX5510 × — Bench mark (see explanation in Notes to Users section of this FIRM panel)
- M1.5 — River Mile

MAP REPOSITORY
Lincoln County, Planning Department, 520 Topaz Street, Kemmerer, Wyoming, 83101
(Maps available for reference only, not for sale)

INITIAL IDENTIFICATION
JUNE 12, 1978

FLOOD HAZARD BOUNDARY MAP REVISIONS
None

FLOOD INSURANCE RATE MAP EFFECTIVE
FEBRUARY 15, 1984

FLOOD INSURANCE RATE MAP REVISIONS
June 17, 2003: to add base flood elevations, to add special flood hazard areas, to change zone designations, to revise map format, and to reflect updated topographic information.

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MAP SCALE 1" = 1000'
500 0 1000 2000 FEET
150 0 300 600 METERS

PANEL 1640C

FIRM
FLOOD INSURANCE RATE MAP
LINCOLN COUNTY, WYOMING (UNINCORPORATED AREAS)

PANEL 1640 OF 3800

(SEE MAP INDEX FOR FIRM PANEL LAYOUT)

CONTAINS:

COMMUNITY	NUMBER	PANEL	SUFFIX
LINCOLN COUNTY, UNINCORPORATED AREAS	560032	1640	C

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
56003C1640C

MAP REVISED:
JUNE 17, 2003

Federal Emergency Management Agency

NOTES TO USERS

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Coastal Base Flood Elevations (BFEs) shown on this map apply only landward of 0.0' National Geodetic Vertical Datum (NGVD). Users of this FIRM should be aware that coastal flood elevations may also be provided in the Summary of Stillwater Elevations table in the Flood Insurance Study report for this community. Elevations shown in the Summary of Stillwater Elevations table should be used for construction and/or floodplain management purposes when they are higher than the elevations shown on this FIRM.

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The **projection** used in the preparation of this map is Universal Transverse Mercator (UTM) Zone 12. The **horizontal datum** is NAD83, GRS1980 spheroid. Differences in datum, spheroid, projection or UTM zones used in the production of FIRMs for adjacent jurisdictions may result in slight positional differences in map features across jurisdiction boundaries. These differences do not affect the accuracy of the FIRM.

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LEGEND

SPECIAL FLOOD HAZARD AREAS SUBJECT TO INUNDATION BY THE 1% ANNUAL CHANCE FLOOD EVENT

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ZONE A	No base flood elevations determined.
ZONE AE	Base flood elevations determined.
ZONE AH	Flood depths of 1 to 3 feet (usually areas of ponding); base flood elevations determined.
ZONE AO	Flood depths of 1 to 3 feet (usually sheet flow on sloping terrain); average depths determined. For areas of alluvial fan flooding, velocities also determined.
ZONE AR	Area of special flood hazard formerly protected from the 1% annual chance flood event by a flood control system that was subsequently decertified. Zone AR indicates that the former flood control system is being restored to provide protection from the 1% annual chance or greater flood event.
ZONE A99	Area to be protected from 1% annual chance flood event by a Federal flood protection system under construction; no base flood elevations determined.
ZONE V	Coastal flood zone with velocity hazard (wave action); no base flood elevations determined.
ZONE VE	Coastal flood zone with velocity hazard (wave action); base flood elevations determined.

FLOODWAY AREAS IN ZONE AE

The floodway is the channel of a stream plus any adjacent floodplain areas that must be kept free of encroachment so that the 1% annual chance flood can be carried without substantial increases in flood heights.

OTHER FLOOD AREAS

ZONE X	Areas of 0.2% annual chance flood; areas of 1% annual chance flood with average depths of less than 1 foot or with drainage areas less than 1 square mile; and areas protected by levees from 1% annual chance flood.

OTHER AREAS

ZONE X	Areas determined to be outside the 0.2% annual chance floodplain.
ZONE D	Areas in which flood hazards are undetermined, but possible.

COASTAL BARRIER RESOURCES SYSTEM (CBRS) AREAS

OTHERWISE PROTECTED AREAS (OPAs)

CBRS areas and OPAs are normally located within or adjacent to Special Flood Hazard Areas

	Floodplain Boundary
	Floodway Boundary
	Zone D Boundary
	CBRS and OPA Boundary
	Boundary dividing Special Flood Hazard Areas of different Base Flood Elevations, flood depths or velocities.
513	Base Flood Elevation line and value; elevation in feet*
(EL 987)	Base Flood Elevation value where uniform within zone; elevation in feet*

*Referenced to the National Geodetic Vertical Datum of 1929

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97°07'30", 32°22'30"	Geographic coordinates referenced to the North American Datum of 1983 (NAD 83)
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600000 FT	5000-foot grid ticks
DX5510 X	Bench mark (see explanation in Notes to Users section of this FIRM panel).
• M1.5	River Mile

MAP REPOSITORY
Lincoln County, Planning Department, 520 Topaz Street, Kemmerer, Wyoming 83101 (Maps available for reference only, not for distribution.)

INITIAL IDENTIFICATION
JUNE 13, 1978
FLOOD HAZARD BOUNDARY MAP REVISIONS
None
FLOOD INSURANCE RATE MAP EFFECTIVE
FEBRUARY 19, 1980
FLOOD INSURANCE RATE MAP REVISIONS

June 17, 2003: to add base flood elevations, to add special flood hazard areas, to change special flood hazard areas, to change zone designations, to update map format, and to reflect updated topographic information.

To determine if flood insurance is available in this community, contact your insurance agent or call the National Flood Insurance Program at (800) 638-6620.

MAP SCALE 1" = 1000'

500 0 1000 2000 FEET
300 0 300 600 METERS

NATIONAL FLOOD INSURANCE PROGRAM

PANEL 1755C

FIRM
FLOOD INSURANCE RATE MAP
LINCOLN COUNTY,
WYOMING
(UNINCORPORATED AREAS)

PANEL 1755 OF 3800
(SEE MAP INDEX FOR FIRM PANEL LAYOUT)

CONTAINS:

COMMUNITY	NUMBER	PANEL	SUFFIX
LINCOLN COUNTY, UNINCORPORATED AREAS	560032	1755	C

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
5600321755C

MAP REVISED:
JUNE 17, 2003

Federal Emergency Management Agency

Plotted 03-01-22.11:37:29.Wed by tedwhite