



**U.S. Department of Agriculture
Forest Service**

National Mapping Program Technical Instructions

Part 5

Public Land Survey System

Standards for USGS and USDA Forest Service Single Edition Quadrangle Maps

Standards for USGS and USDA Forest Service Single Edition Quadrangle Maps
Part 5: Public Land Survey System

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Standards for USGS and USDA Forest Service Single Edition Quadrangle Maps
Part 5: Public Land Survey System

5. PUBLIC LAND SURVEY SYSTEM

This part of the standard provides a description of the Public Land Survey System (PLSS) features shown on USGS and USDA Forest Service single edition quadrangle maps.

LAND GRANT

LAND GRANT - An area of land to which title was conferred by a predecessor government and confirmed by the U.S. Government after the territory in which it is situated was acquired by the United States.

Characteristics

Show the names of LAND GRANTS if they are known.

Delineation

The limit of a LAND GRANT is the extent of the private land holding as defined by the original title, approved BLM/GLO plats, or approved plats of dependent resurveys by private surveyors.

Depiction Conditions

Show all.

Source Interpretation Guidelines

All

The arpent land division was introduced by the French and continued by the Spanish. This long narrow parcel of land is common to land divisions along navigable streams of southern Louisiana, but it also extends along major waterways in other areas. The arpent unit of measure varied in size, although the French most frequently used the arpent of Paris, which was approximately 192 feet (about 58.5 meters). French arpent land divisions are typically 2 to 4 arpents wide along the river by 40 to 60 arpents deep, while the Spanish arpent land divisions were typically 6 to 8 arpents wide by 40 arpents deep. After the acquisition of the Louisiana Purchase, the American government used a similar land division that was a modification of the French system.

Do not depict French arpent land grants in the area of the Louisiana Purchase as LAND GRANTS. See PUBLIC LAND SURVEY SYSTEM AREA.

If a LAND GRANT has township and range lines through it or is subdivided by a private survey, show the LAND GRANT and the PUBLIC LAND SURVEY SYSTEM AREA lines.

Do not depict areas that are symbolized as land grants but do not have a name found in appendix 5-C as LAND GRANTS. Depict these areas as PUBLIC LAND SURVEY SYSTEM AREA tracts.

Graphic

Depict French arpent land grants within the area of the Louisiana Purchase as PUBLIC LAND SURVEY SYSTEM AREA sections, even though they are shown on previously published maps with the same symbol as land grants.

Symbolization

Characteristics	Symbol*	Label
N/A	524.2 name	N/L; Show name if known; Label line "GRANT BOUNDARY" if necessary for clarity
* See SURVEY LINE for symbol.		

PRINCIPAL MERIDIAN

PRINCIPAL MERIDIAN - The line extending north and south, intended to follow along a true meridian, from the initial point of a Rectangular Survey. Ranges are referenced east or west of the principal meridian.

Characteristics

Show the names of PRINCIPAL MERIDIANS.

Delineation

The limit of a PRINCIPAL MERIDIAN is the extent of the component SURVEY LINES. All PRINCIPAL MERIDIANS have been defined by the Bureau of Land Management (BLM), as depicted on the map entitled Principal Meridians and Base Lines Governing the United States Public Land Surveys, BLM, 1988.

Depiction Conditions

Show all.

Source Interpretation Guidelines

All

See appendix 5-A for the names of the PRINCIPAL MERIDIANS of the United States. Valid Principal Meridian names are the Origins of Survey shown in appendix 5-A that are of the type "PM". Origins of Survey that are listed as "OH" (Ohio) are not PRINCIPAL MERIDIAN names.

See SURVEY LINE for information on how to label base lines.

Graphic

N/A

Symbolization

Characteristics	Symbol*	Label
N/A	524.2 name	N/L; Show name and "PRINCIPAL MERIDIAN"
* See SURVEY LINE for symbol.		

PUBLIC LAND SURVEY SYSTEM AREA

PUBLIC LAND SURVEY SYSTEM AREA - An area of land which is subdivided by the Public Land Survey System (PLSS), and was originally created on public domain lands, and the rules for its use were defined by the authority of the U.S. Government. The PLSS has since been extended, following similar rules, into non-public domain areas.

Characteristics

Show the following PUBLIC LAND SURVEY SYSTEM AREA township divisions:

Donation Land Claim	Area of 320 or 640 acres that was allocated to a settler under the Donation Act of September 27, 1850 to preserve the rights of pre-statehood settlers claimed prior to the regular division of townships and ranges.
Military or Warrant Lot	An allotment of land designated on a BLM plat as a military or warrant lot.
Protraction Block	Area of uncertain acreage which lies between the coordinate based interior and the prior surveyed boundaries of record that generally form the exterior perimeter of the protracted area.
Section	First level subdivision of a (PLSS) Township. Sections are nominally one mile by one mile in size, containing approximately 640 acres.
Tract	A metes and bounds survey of an area at large within a township. In modern public land surveys, the term is used specifically to mean a parcel of land that lies in more than one section or that cannot be identified completely as a part of a particular section
Undivided Area	An area that was never surveyed or where subdivisions are not shown.

Show the following PUBLIC LAND SURVEY SYSTEM AREA sections based on the status of the survey:

Approved by BLM	The area has an approved BLM/GLO plat certified
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PUBLIC LAND SURVEY SYSTEM AREA

by the Surveyor General or delegate.

Not Approved by BLM

The area was privately surveyed and/or does not have an approved BLM/GLO plat, but is accepted by land owners and courts.

Show the township, range, and area designators of PUBLIC LAND SURVEY SYSTEM AREAS.

Delineation

The limit of a PUBLIC LAND SURVEY SYSTEM AREA is the extent of the first township division type, as defined by approved BLM/GLO plats, BLM approved plats of dependent resurveys by private surveyors, or other accepted survey plats.

Depiction Conditions

If a PUBLIC LAND SURVEY SYSTEM AREA has an approved BLM/GLO plat and is no smaller than the first level subdivision of a township,

Or

If a PUBLIC LAND SURVEY SYSTEM AREA does not have an approved BLM/GLO plat, but is accepted by land owners and courts, has a township and range system similar to the Rectangular System of Surveys, is no smaller than the first level subdivision of a township, and is outside of the present public lands but is within a Public Land State,

Or

If a PUBLIC LAND SURVEY SYSTEM AREA is a tract or donation land claim and has an approved BLM/GLO plat,

Or

If a PUBLIC LAND SURVEY SYSTEM AREA is designated as a "Lot" on the BLM plat, but is not wholly contained within a section, the survey area is not penetrated by rectangular survey lines, and the extent of the survey defines the limiting lines of a rectangular survey or is contiguous with a survey that defines the limiting lines of a rectangular survey,

Or

If a PUBLIC LAND SURVEY SYSTEM AREA is a protraction block that is designated by the BLM,

Then show.

Source Interpretation Guidelines

All

The following are not Public Land States: Connecticut, Delaware, Georgia, Hawaii, Kentucky, Maine, Maryland, Massachusetts, New Hampshire, New Jersey, New York, North Carolina, Pennsylvania, Rhode Island, South Carolina, Tennessee, Texas, Vermont, Virginia, and West Virginia.

PUBLIC LAND SURVEY SYSTEM AREA townships are normally approximately six miles on a side with limits conforming to meridians and parallels, located with reference to a point of origin that is the initial point of a principal meridian and base line or river base. Identify PLSS townships by township and range designators and SURVEY LINES. Township designators normally specify the row of the PLSS township and the direction of the row from the base line. Range designators normally specify the column of the PLSS township and the direction of the column from a Principal Meridian or River Base. Exceptions exist in the State of Ohio. The township and range designators are normally whole numbers; however, show the fractional designation of a row or column, when applicable.

Township designator directions are normally "N" or "S" (for "north" and "south") and range designation directions are usually "E" or "W" (for "east" and "west"). In Ohio, if the township or range direction is not indicated on the BLM plats, do not show the township and range designator directions.

Exceptions to the normal numbering scheme for township and range designators exist in Ohio in the Between the Miamis - North of Symmes Purchase and the Symmes Purchase, where the township designators are numbered east from the Great Miami River and the range designators are numbered north from the Ohio River.

There are instances of duplicate township and range designators for different PLSS townships based on the same point of origin. Such duplicate designations occur most commonly at State boundaries and both of the duplicate townships are identified according to their location relative to the base line or meridian. (For example, T 34 N - R 7 W south and north of the Ute Line on the Durango, CO 1:24,000-scale quadrangle.)

See appendix 5-B for for more information on township and range designators and a partial list of PLSS township duplicates.

PUBLIC LAND SURVEY SYSTEM AREA

The rectangular system called for sections to be one mile by one mile. Depending on the skill of the surveyor, the terrain, and other conditions, this may or may not have been achieved. However, by looking at the completed sections, the position of section numbers, isolated pieces of survey lines, and survey corners if present, the available information can usually be used to determine the general grid.

Range lines are sometimes offset when they cross township lines, which may create the impression that the regular grid cannot be approximated. However, often the regular grid can be assumed if this offset is taken into consideration.

Sections are usually numbered from 1 to 36, but can be numbered higher, and in some States may include alphabetic characters. Sections are normally numbered beginning in the northeast section of the township, proceeding west to section 6, then continuing with section number 7 in the westernmost section of the next row to the south, and proceeding east to section 12, and so on, to section 36 in the southeast section of the township. Exceptions to this numbering scheme exist in the State of Ohio.

Show areas for which section numbers can be determined as PUBLIC LAND SURVEY SYSTEM AREA sections, even though they are not completely surrounded by SURVEY LINES. Show areas that have not been surveyed or have not been subdivided as a single PUBLIC LAND SURVEY SYSTEM AREA, without any further designation. This includes single PLSS townships that have township and range designators but are not subdivided, as well as areas that cover more than one PLSS township. Depict large water bodies or portions of a water bodies without section lines or section numbers as the appropriate hydrographic features and not as PUBLIC LAND SURVEY SYSTEM AREAS.

PLSS lines should be shown as originally surveyed. If the shoreline of a meandered water body has changed, do not extend the SURVEY LINES to the shoreline, or pull them back from the shoreline, where discrepancies exist.

PLSS lines may be missing because there was insufficient evidence on the ground to complete the grid, because the survey lines were interrupted by a water body that was segregated from the public domain, or because the area was not surveyed.

PUBLIC LAND SURVEY SYSTEM AREA

If a PUBLIC LAND SURVEY SYSTEM AREA is an unapproved survey within a LAND GRANT and both meet depiction conditions, show the PUBLIC LAND SURVEY SYSTEM AREA and the LAND GRANT.

The arpent land division was introduced by the French and continued by the Spanish. This long narrow parcel of land is common to land divisions along navigable streams of southern Louisiana, but it also extends along major waterways in other areas. The arpent unit of measure varied in size, although the French most frequently used the arpent of Paris, which was approximately 192 feet (about 58.5 meters). French arpent land divisions are typically 2 to 4 arpents wide along the river by 40 to 60 arpents deep, while the Spanish arpent land divisions were typically 6 to 8 arpents wide by 40 arpents deep. After the acquisition of the Louisiana Purchase, the American government used a similar land division that was a modification of the French system.

Depict arpent sections in Louisiana and French arpent land grants, which are similar in shape to arpent sections, as PUBLIC LAND SURVEY SYSTEM sections.

If a PUBLIC LAND SURVEY SYSTEM AREA is a donation land claim, lot, or tract that lies in more than one PLSS township and the complete area is shown on BLM plats as being part of each township by having a different identifier in each township, show township and range designators for the township that contains corner #1 (generally the southeast corner).

Donation land claims are located in Arizona, Florida, New Mexico, Oregon, and Washington.

Show areas of private surveys, or other surveys that are not approved by BLM as PUBLIC LAND SURVEY SYSTEM AREAS that are not approved by BLM, if the depiction conditions are met.

Since dependent resurveys (see section 6-4 of the Manual of Surveying Instructions, Bureau of Land Management, 1973) of the PLSS by private surveyors or by government agencies may be the best available evidence for PLSS portrayal, show them as PUBLIC LAND SURVEY SYSTEM AREAS that are approved by BLM.

PUBLIC LAND SURVEY SYSTEM AREA

Graphic

PLSS survey lines may be dropped on previously published maps because they were coincident with other features. If the feature they were coincident with is deleted, restore the SURVEY LINE as originally surveyed.

If PLSS land lines are broken at a tract boundary on the previously published map, but the tract does not meet depiction conditions, show the land lines as originally surveyed between the points where the section lines terminate.

If former reservations (such as old Indian, military, and lighthouse reservations) are symbolized on previously published maps with land grant or section line symbols and labeled, show their extent with SURVEY LINES where they form the limits of subdivisions of rectangular surveys. Do not show these lines if they do not form the limit of a subdivision of a rectangular survey.

If a PUBLIC LAND SURVEY SYSTEM AREA is a donation land claim, lot, or tract that lies in more than one township, and corner #1 cannot be identified from the previously published map, show township and range designators for the township that contains the largest portion of the area.

Depict areas that are labeled with township and range designators on previously published maps that are not subdivided as PUBLIC LAND SURVEY SYSTEM AREAS because they are still considered part of the Rectangular System of Surveys. This includes areas that cover more than one township.

Depict French arpent land grants within the area of the Louisiana Purchase as PUBLIC LAND SURVEY SYSTEM AREA sections, even though they are shown on previously published maps with the same symbol as land grants.

Symbolization

Characteristics	Symbol*	Label**
Donation Land Claim	524.2 label	Show area survey number
Lot	N/A	N/L
Military or Warrant Lot	N/A	N/L
Protraction Block	524.2 label	Show "PB" and number
Section, Approved by BLM	524.2 label	Show section number
Section, Not Approved by BLM	524.2 label	Show section number
Tract	524.2 label	Show area survey number
Undivided Area	N/A	N/L
<p>* See SURVEY LINE for symbol.</p> <p>** See appendix 5-B for examples of township and range designators. See appendix 2-E in the <u>Standards for Revised Primary Series Quadrangle Maps</u> for Ohio survey labels and margin notes.</p>		

SPECIAL SURVEY AREA

SPECIAL SURVEY AREA - An area of land within the original holdings secured by the Federal Government (within Public Land states), subdivided by surveys that involve unusual applications of, or departures from, the rectangular system. The subdivided surveys often carry out the provisions of a special legislative act.

Characteristics

Show the following SPECIAL SURVEY AREAS:

Homestead Entry Survey	An entry under the U.S. land laws for the purpose of acquiring title to a portion of the public domain under the Homestead Laws. A Homestead Entry Survey is a metes and bounds survey entered under the Act of June 11, 1906 as amended.
Indian Allotment	An allocation of a parcel of public lands or Indian Reservation lands to a Native American for his or her individual use.
U.S. Survey	A metes and bounds survey executed to comply with one of various regulations for entry of public lands in Alaska.

Show the parcel identifiers of subdivisions of SPECIAL SURVEY AREAS.

Delineation

The limit of a SPECIAL SURVEY AREA is the extent of the area as defined by approved BLM/GLO plats, or BLM approved plats of dependent resurveys by private surveyors.

Depiction Conditions

If a SPECIAL SURVEY AREA is a homestead entry survey, Indian allotment, or U.S. survey,
Then show.

Source Interpretation Guidelines

All

The characteristics for SPECIAL SURVEY AREAS are indicated on BLM/GLO plats.

Depict Forest entry surveys as homestead entry surveys.

SPECIAL SURVEY AREA

Show PLSS lines as originally surveyed. If the shoreline of a meandered water body has changed, do not extend the SURVEY LINES to the shoreline, or pull them back from the shoreline, where discrepancies exist.

Do not depict areas that are symbolized as land grants but do not have a name found in appendix 5-C as SPECIAL SURVEY AREAS. Depict these areas as PUBLIC LAND SURVEY SYSTEM AREA tracts.

Graphic

SPECIAL SURVEY AREA parcel identifiers may not appear on previously published maps because there was not always room to label the parcels on the graphic. It is not necessary to add parcel identifiers that are missing on previously published maps.

Show SPECIAL SURVEY AREA parcel areas that are numbered on previously published maps, even if they are not completely surrounded by SURVEY LINES.

Symbolization

Characteristics	Symbol*	Label**
Homestead Entry Survey	524.2 label	Show "HES" and number
Indian Allotment	524.2 label	Show "INDIAN ALLOTMENT" and number
U.S. Survey	524.2 label	Show "U S SURVEY" and number
* See SURVEY LINE for symbol. ** Do not show the parcel identifier if the area is less than the length of the parcel identifier + 0.04".		

SURVEY CORNER

SURVEY CORNER - A survey location that was originally established for the purpose of referencing and/or defining the limits of a survey.

Characteristics

Show the following SURVEY CORNERS:

Amended Monument	A corner whose position no longer marks the true position for the corner, but which is connected by course and distance to the new corner.
Angle Point	A point of survey where the alignment or boundary deflects from a straight line. Any break in bearing on a survey can be considered an angle point.
Location Monument	A point established by a mineral survey in a district having no corners of the public survey. It is used as reference for one or more mineral surveys or for an isolated special survey. Includes U.S. Mineral Monuments and U.S. Location Monuments.
Meander Corner	A corner established where a township line, section line, or other survey intersects the bank of a navigable stream or other meanderable body of water.
Section Corner	A corner at the extremity of a PLSS section boundary.
Section Subdivision Corner	A corner at the extremity of a quarter-section boundary or a smaller subdivision of a section, not including the section corner.
Special Survey Corner	An established location along the survey line of a land grant, tract, or other special survey area.
Unspecified	Does not have to be known or specified for the

SURVEY CORNER

feature to be shown.

Witness Corner A monumented point usually on a line of survey and within 10 chains (660 feet) of a corner, established only in situations where it is impracticable to occupy the site of a corner.

Witness Point A monumented station on a line of survey that is used to perpetuate an important location more or less remote from and without special relation to any regular corner.

Show the following section corner and section subdivision corner SURVEY CORNERS if their location has not been tied to their true ground position:

Weak Corners established by the USDA Forest Service that have been found but their location has not been tied to their true ground position.

Show the specific BLM designators for location monument and special survey corner SURVEY CORNERS. Location monument labels have "USLM" or "USMM" as part of the designator. If a special survey corner is a mile post that has a whole number value, show the whole number value as part of the designator label.

Delineation

The limit of a SURVEY CORNER is the location as marked by a monument or the theoretical position of an established survey location, based on the best available evidence. This evidence may include plat data, field notes, imagery, original map positions, and secondary information from other agencies. Physical evidence of the original monument must stand as the true SURVEY CORNER it was intended to represent and must be given controlling preference over recorded directions and lengths of lines.

Depiction Conditions

If a SURVEY CORNER marks or references a PLSS corner and the monument is one of the following:

- pits and mounds with buried durable material such as charcoal, glass, etc.,
- a scribed wooden stake or post,
- a scribed set stone or mark on stone,
- an iron post with a GLO or BLM inscribed cap,

SURVEY CORNER

a marked tablet set in a concrete post or rock,
a corner location referenced by a bearing tree,
a scribed section corner tree,

Then show.

Source Interpretation Guidelines

All

If a survey location defines the limits of more than one survey type (for instance, a PLSS-related survey versus an administrative boundary), show either a SURVEY CORNER or a BOUNDARY POINT, depending on the intended purpose for establishing the original monument.

Show PLSS half-mile posts in Alabama and Florida as section subdivision corners (quarter-section corners).

Amended monuments and witness corners are associated with section corners, section subdivision corners (quarter-section corners), or meander corners.

If a SURVEY CORNER has an established SPOT ELEVATION (Hypsography theme), show the SURVEY CORNER and the SPOT ELEVATION.

The hierarchy for symbolizing SURVEY CORNERS, BOUNDARY POINTS, and control stations which are coincident and/or near each other is as follows, from most important to least important:

Control Station
BOUNDARY POINT
SURVEY CORNER

If a SURVEY CORNER coincides with a horizontal control station, show the horizontal control station but do not show the SURVEY CORNER.

If a portion of a SURVEY CORNER coalesces with a horizontal control station, show the horizontal control station but do not show that portion of the SURVEY CORNER.

If a SURVEY CORNER coincides with a class 1, 2 or 3 ROAD or another linear feature, show the other feature but do not show the SURVEY CORNER.

SURVEY CORNER

Do not depict fence corners, rock cairns, iron pipes, unmarked wooden stakes or posts, unmarked stones, or other indicated corners as SURVEY CORNERS.

Graphic

If a SURVEY CORNER is isolated on the previously published map, show the corner as an unspecified SURVEY CORNER.

If a found corner with the letters "CC" is shown on the previously published map, show the corner as a section corner.

Angle points are marked "AP" on the plats and on the monument label on previously published maps.

The USGS uses the terms "found" and "closing" to describe section corners. Found corners designate existent corners of the PLSS which have been recovered by field investigation and are shown with a red cross (symbol 523.5) or a red closing corner "T" (symbol 523.6) on previously published maps. Closing corners are found corners at the intersections of surveyed lines and previously established survey boundaries or boundaries of reservations, grants, claims, and other previously surveyed or segregated tracts of land. In addition, the USGS used to symbolize indicated section corners whose official marks or monuments could not be recovered or identified. These are shown in a lighter lineweight than found corners on previously published maps. It is not necessary to delete indicated section corner symbols unless there is a new feature in the same position or else the PLSS is revised, but they should not be shown as found corners.

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SURVEY CORNER

Symbolization

Characteristics	Symbol	Label
Amended Monument	523.5 found	AM
Angle Point	523.5 523.6 closing	AP
Location Monument	512.106	USSM or USLM and number
Meander Corner	523.7	MC
Section Corner	523.5 found 523.6 closing	N/L
Section Corner, Weak	523.20	N/L
Section Subdivision Corner	523.5 found 523.6 closing	N/L
Section Subdivision Corner, Weak	Weak closing corners shown with 523.6 and same lineweight as 523.20	N/L
Special Survey Corner	523.11	N/L
Witness Corner	523.7	WC
Witness Point	523.5 found	WP
Unspecified	N/A	N/L

SURVEY LINE

SURVEY LINE - The limiting line between Public-Land and/or Private subdivisions.

Characteristics

Show the following SURVEY LINES:

Protracted	Theoretically extended from or fit between established survey points pending actual ground survey.
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Surveyed	Observations and measurements have been taken on the ground in order to establish monuments that mark the boundaries of an area. These surveys have field notes and plats that are approved and accepted by the delegated authority.
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Show the following surveyed SURVEY LINES based on their positional accuracy:

Approximate	Conditions permit the feature to be confidently positioned between 0.02" and 0.1" (40 feet and 200 feet at 1:24,000 scale) of its true ground position.
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Definite	Conditions permit the feature to be confidently positioned. Horizontal data are confidently positioned within 0.02" (40 feet at 1:24,000 scale), at map scale, of true ground position. Vertical data are confidently positioned within one-half contour interval of the true ground position.
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Doubtful	Conditions prevent the feature from being confidently positioned within 0.1" (200 feet at 1:24,000 scale), at map scale, of the true ground position. Doubtful SURVEY LINES are established by the USDA Forest Service.
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Unspecified	Does not have to be known or specified for the feature to be shown.
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If a SURVEY LINE is associated with a SPECIAL SURVEY AREA, an unapproved PUBLIC LAND SURVEY SYSTEM AREA, or LAND GRANT, show the positional accuracy as

unspecified.

Show the names of SURVEY LINES if they are associated with the line itself and not with the survey area shown (for instance, Fulton Line Greenville Treaty Line). Otherwise, the name of the line does not apply and should not be shown.

Delineation

The limit of a SURVEY LINE is defined by the best available evidence for SURVEY CORNERS. The ground positions of the original monuments remain the true positions, even though directions and lengths of lines indicate positions different from the ground positions.

Depiction Conditions

If a SURVEY LINE is surveyed,

Or

If a SURVEY LINE is protracted, is approved by the proper BLM authority after 1993, and has a latitude and longitude table on the plat for position of interior corners,

Or

If a SURVEY LINE is protracted, is associated with a PUBLIC LAND SURVEY SYSTEM AREA, and the Origin of Survey is the Copper River Meridian, Fairbanks Meridian, Seward Meridian, Kateel River Meridian, or the Umiat Meridian,

Or

If a SURVEY LINE is protracted, is not in Alaska, and is provided by the USDA Forest Service,

Then show.

Source Interpretation Guidelines

All

Show PLSS lines as originally surveyed. If the shoreline of a meandered water body has changed, do not extend the SURVEY LINES to the shoreline, or pull them back from the shoreline, where discrepancies exist.

PLSS lines may be missing because there was insufficient evidence on the ground to complete the grid, because the survey lines were interrupted by a waterbody that was segregated from the public domain, or because the area was not surveyed.

For more information on how SURVEY LINE relates to other features in this

SURVEY LINE

theme, see LAND GRANT, PRINCIPAL MERIDIAN, PUBLIC LAND SURVEY SYSTEM AREA, and SPECIAL SURVEY AREA.

The arpent land division was introduced by the French and continued by the Spanish. This long narrow parcel of land is common to land divisions along navigable streams of southern Louisiana, but it also extends along major waterways in other areas. The arpent unit of measure varied in size, although the French most frequently used the arpent of Paris, which was approximately 192 feet (about 58.5 meters). French arpent land divisions are typically 2 to 4 arpents wide along the river by 40 to 60 arpents deep, while the Spanish arpent land divisions were typically 6 to 8 arpents wide by 40 arpents deep. After the acquisition of the Louisiana Purchase, the American government used a similar land division that was a modification of the French system.

The hierarchy for symbolizing SURVEY LINES that are coincident with other SURVEY LINES is according to the feature which is associated with the SURVEY LINE, as follows, from most important to least important:

LAND GRANT
SPECIAL SURVEY AREA
PUBLIC LAND SURVEY SYSTEM AREA

If a SURVEY LINE coincides with a SURVEY CORNER that is not unspecified, break the SURVEY LINE.

If a SURVEY LINE coincides with a horizontal control station, break the SURVEY LINE.

Graphic

PLSS lines may not have been shown on previously published maps because they were coincident with other features. If the feature they were coincident with is deleted, restore the SURVEY LINE as originally surveyed.

If former reservations (such as old Indian, military, and lighthouse reservations) are symbolized on previously published maps with land grant or section line symbols and labeled, show their extent with SURVEY LINES where they form the limits of subdivisions of rectangular surveys. Do not show these lines if they do not form the limit of a subdivision of a rectangular

survey.

On maps published before 1940, rectangular survey subdivision lines are symbolized by black dotted lines.

On maps published between 1940 and 1948, rectangular survey subdivision lines are symbolized by black solid lines.

Depict French arpent land grants within the area of the Louisiana Purchase as PUBLIC LAND SURVEY SYSTEM AREA sections, even though they are shown on previously published maps with the same symbol as land grants.

Symbolization

Characteristics	Symbol	Label*
Surveyed, Approximate	523.3 base line	BASE LINE
	523.3 principal meridian	N/L; Show name and "PRINCIPAL MERIDIAN"
	523.3 range	N/L; Show "R", number, and "E" or "W"
	523.3 township	N/L; Show "T", number, and "N" or "S"
	523.4 section	N/L
Surveyed, Definite	523.1 base line	BASE LINE
	523.1 principal meridian	N/L; Show name and "PRINCIPAL MERIDIAN"
	523.1 range	N/L; Show "R", number, and "E" or "W"
	523.1 township	N/L; Show "T", number, and "N" or "S"
	523.2 military or warrant lot	N/L
	523.2 section	N/L
Surveyed, Doubtful	523.18 range	N/L; Show "R", number, and "E" or "W"
	523.18 township	N/L; Show "T", number, and "N" or "S"
	523.19 section	N/L

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SURVEY LINE

Characteristics	Symbol	Label*
Surveyed, Unspecified	523.10 donation land claim	N/L
	523.10 land grant	N/L; Label line "GRANT BOUNDARY" if necessary for clarity
	523.10 homestead entry	N/L
	523.10 survey	N/L
	523.10 Indian allotment	N/L
	523.10 tract	N/L
	523.10 U.S. survey	N/L; Show "R", number, and
	523.12 range, not approved by	"E" or "W"
	BLM	N/L; Show "T", number, and
	523.12 township, not approved by	"N" or "S"
BLM	N/L	
523.13 section, not approved by		
BLM		
Protracted	523.16 base line	BASE LINE
	523.16 principal meridian	N/L; Show name and "PRINCIPAL MERIDIAN"
	523.16 range	N/L; Show "R", number, and "E" or "W"
	523.16 township	N/L; Show "T", number, and "N" and "S"
	523.17 section	N/L
<p>* See appropriate feature for interior area labels. See appendix 5-B for examples of township and range designators. See appendix 2-E in the <u>Standards for Revised Primary Series Quadrangle Maps</u> for Ohio survey labels and margin notes.</p>		

Standards for USGS and USDA Forest Service Single Edition Quadrangle Maps
Part 5: Public Land Survey System
Appendix 5-A: Origin of Survey

APPENDIX 5-A
Origin of Survey

Standards for USGS and USDA Forest Service Single Edition Quadrangle Maps
Part 5: Public Land Survey System
Appendix 5-A: Origin of Survey

This appendix lists the names of the principal meridians of the United States. Valid principal meridian names are the "Origin of Survey" names that are of the type "PM". Origin of Survey names that are listed as "OH" (Ohio) are not principal meridian names.

Standards for USGS and USDA Forest Service Single Edition Quadrangle Maps
 Part 5: Public Land Survey System
 Appendix 5-A: Origin of Survey

PM = Principal Meridian, OH = Bases in Ohio

Origin of Survey	Type	State(s)	Date
First Principal Meridian	PM	OH ¹ , IN	1819
Second Principal Meridian	PM	IL, IN	1805
Third Principal Meridian	PM	IL	1805
Fourth Principal Meridian	PM	IL	1815
Fifth Principal Meridian	PM	AR, IA, MN, MO, ND, SD	1815
Sixth Principal Meridian	PM	CO, KS, NE, SD, WY	1855
Black Hills Meridian	PM	SD	1878
Boise Meridian	PM	ID	1867
Chickasaw Meridian	PM	MS	1833
Choctaw Meridian	PM	MS	1821
Cimarron Meridian	PM	OK	1881
Copper River Meridian	PM	AK	1905
Fairbanks Meridian	PM	AK	1910
Gila and Salt River Meridian	PM	AZ	1865
Humboldt Meridian	PM	CA	1853
Huntsville Meridian	PM	AL, MS	1807
Indian Meridian	PM	OK	1870
Louisiana Meridian	PM	LA	1807
Michigan Meridian	PM	MI, OH	1815
Principal Meridian	PM	MT	1867
Mount Diablo Meridian	PM	CA, NV	1851
Navajo Meridian	PM	AZ	1869
New Mexico Principal Meridian	PM	CO, NM	1855
Saint Helena Meridian	PM	LA	1819
Saint Stephens Meridian	PM	AL, MS	1805
Salt Lake Meridian	PM	UT	1855
San Bernardino Meridian	PM	CA, AZ ²	1852
Seward Meridian	PM	AK	1911
Tallahassee Meridian	PM	FL, AL	1824
Uintah Meridian	PM	UT	1875

¹ This area in Ohio is portrayed on maps by USGS as either the Congress Lands or the Congress Lands Based on the First Principal Meridian.

² Although the San Bernardino Meridian is for California, BLM records show some Arizona townships are referenced to it.

Standards for USGS and USDA Forest Service Single Edition Quadrangle Maps
 Part 5: Public Land Survey System
 Appendix 5-A: Origin of Survey

PM = Principal Meridian, OH = Bases in Ohio

Origin of Survey	Type	State(s)	Date
Ute Meridian	PM	CO	1880
Washington Meridian	PM	MS	1803
Willamette Meridian	PM	OR, WA	1851
Wind River Meridian	PM	WY	1875
Ohio River	OH	OH, IN	1785
Muskingum River	OH	OH	1800
Scioto River	OH	OH	1799
Twelve Mile Square Reserve	OH	OH	1805
Kateel River Meridian	PM	AK	1956
Umiat Meridian	PM	AK	1956
Extended Fourth Principal Meridian	PM	MN, WI	1831
Great Miami River	OH	OH	1798
Base Line of the United States Military Survey	OH	OH	1797

Standards for USGS & USDA Forest Service Single Edition Quadrangle Maps
Part 5: Public Land Survey System
Appendix 5-B: Township and Range Designators

APPENDIX 5-B
Township and Range Designators

Standards for USGS & USDA Forest Service Single Edition Quadrangle Maps
Part 5: Public Land Survey System
Appendix 5-B: Township and Range Designators

This appendix provides examples of township and range designators and contains a partial list of PLSS township duplicates.

This appendix is intended for reference only. There are other instances of duplicate townships that are not on the list.

Standards for USGS & USDA Forest Service Single Edition Quadrangle Maps
Part 5: Public Land Survey System
Appendix 5-B: Township and Range Designators

Township designators are made up of the following characteristics:

Characteristic

Township Number Whole number, if applicable
 Or
 Fraction ($\frac{1}{4}$, $\frac{1}{2}$, $\frac{3}{4}$), if applicable

Township Direction North or south (N, S), if applicable*

Examples: **Township 23 North would be: T 23 N**

Township 4 $\frac{1}{2}$ South would be: T 4 $\frac{1}{2}$ S

Range designators are made up of the following characteristics:

Characteristic

Range Number Whole number, if applicable
 Or
 Fraction ($\frac{1}{4}$, $\frac{1}{2}$, $\frac{3}{4}$), if applicable

Range Direction East or west (E, W), if applicable*

Examples: **Range 11 West would be: R 11 W**

Range 7 $\frac{1}{2}$ East would be: R 7 $\frac{1}{2}$ E

* Some township layouts, such as in Ohio and Indiana, number the tiers of townships or ranges from a line (such as the Ohio River). Such layouts do not have an initial point as an origin for both township and range numbering; townships are not identified as north or south of a point and ranges are not identified as east or west of a point.

Standards for USGS & USDA Forest Service Single Edition Quadrangle Maps
 Part 5: Public Land Survey System
 Appendix 5-B: Township and Range Designators

The following is a partial list of PLSS township duplicates (see PUBLIC LAND SURVEY AREA for additional information):

<u>State</u>	<u>Meridian</u>	<u>Township and Range</u>
California/Nevada	Mt. Diablo Meridian	Township 1N, Ranges 31E - 32E
		Township 2N, Ranges 30E - 31E
		Township 3N, Ranges 29E - 30E
		Township 4N, Ranges 28E - 29E
		Township 5N, Ranges 26E - 28E
		Township 6N, Ranges 25E - 27E
		Township 7N, Ranges 24E - 26E
		Township 8N, Ranges 23E - 25E
		Township 9N, Ranges 22E - 24E
		Township 10N, Ranges 21E - 22E
		Township 1S, Ranges 32E - 33E
		Township 2S, Ranges 33E - 34E
		Township 3S, Ranges 34E - 35E
		Township 4S, Ranges 35E - 36E
		Township 5S, Ranges 37E - 38E
		Township 6S, Ranges 38E - 39E
		Township 7S, Ranges 39E - 40E
		Township 8S, Ranges 39E - 41E
		Township 9S, Ranges 40E - 42E
		Township 10S, Ranges 41E - 43E
Township 11S, Ranges 42E - 44E		
Township 12S, Ranges 43E - 45E		
Township 13S, Ranges 45E - 46E		
Township 14S, Ranges 45E - 46E		
Township 15S, Range 46E		
Colorado	New Mexico Principal Meridian	Township 34N, Ranges 3W - 15W
Colorado/Wyoming	6th Principal Meridian	Township 12N, Ranges 85W - 104W
North Dakota/ South Dakota	5th Principal Meridian	Township 128N, Ranges 47W - 49W Township 129N, Ranges 49W - 55W Township 130N, Ranges 53W - 55W
Oregon	Willamette Meridian	Township 36S, Range 7E

Standards for USGS & USDA Forest Service Single Edition Quadrangle Maps
Part 5: Public Land Survey System
Appendix 5-B: Township and Range Designators

South Dakota	5th Principal Meridian	Township 118N, Range 52W
		Township 119N, Ranges 51W - 53W
		Township 120N, Ranges 51W - 53W
		Township 121N, Range 51W
		Township 122N, Ranges 50W - 51W
		Township 123N, Range 50W
		Township 124N, Ranges 50W and 54W
		Township 125N, Ranges 49W - 50W
		Township 126N, Ranges 48W - 49W
		Township 127N, Ranges 47W - 48W

Standards for USGS & USDA Forest Service Single Edition Quadrangle Maps
Part 5: Public Land Survey System
Appendix 5-C: Named Land Grants

APPENDIX 5-C
Named Land Grants

Standards for USGS & USDA Forest Service Single Edition Quadrangle Maps
Part 5: Public Land Survey System
Appendix 5-C: Named Land Grants

This appendix lists named land grants in alphabetical order by State. An asterisk (*) preceding the name indicates that either the land grant name is not in the Bureau of Land Management (BLM) data dictionary, or the use of the name is ambiguous. These land grant names do, however, appear on USGS maps and are stored in the Geographic Names Information System (GNIS).

This appendix is intended for reference purposes only. There may be other instances of valid land grant names that are not on the list.

Standards for USGS & USDA Forest Service Single Edition Quadrangle Maps
Part 5: Public Land Survey System
Appendix 5-C: Named Land Grants

ARIZONA

ARIBACA	SAN IGNACIO DE LA CANOA
LOS NOGALES DE ELLAS	SAN IGNACIO DEL BABOCOMARI
LUIS MARIA BACA FLOAT #3	SAN JOSE DE SONOITA
LUIS MARIA BACA FLOAT #5	SAN JUAN DE LAS BOQUILLAS Y NOGALES
MARIA SANTISIMA DEL CARMEN	SAN RAFAEL DE LA ZANJA
RANCHO DE MARTINEZ	SAN RAFAEL DEL VALLE
SABINO OTERO ET AL	*SAN RAFAEL DEL VALLE (in Cochise County)
SAN BERNARDINO	TUMACACORI AND CALABAZAS

CALIFORNIA

100 VARA LOT AT SAN PEDRO	BOCA DE SANTA MONICA
ACALANES	BODEGA
AGUA CALIENTE (in Alameda & Santa Clara Counties)	BOGA
AGUA CALIENTE (in Sonoma County)	BOLSA DE CHAMISAL
AGUA HEDIONDA	BOLSA DE LAS ESCORPINAS
*AGUA JITA	BOLSA DE SAN CAYETANO
AGUA PUERCA Y LAS TRANCAS	BOLSA DE SAN FELIPE
AGUAJE DE LA CENTINELLA	BOLSA DEL PAJARO
AGUAJIT	BOLSA DEL POTRERO Y MORO COJO
AGUAS FRIAS	BOLSA NUEVA Y MORO COJO
APTOS	BOSQUEJO
*APTOS	BUENA VISTA
ARROYO CHICO	BUENA VISTA
ARROYO DE LA ALEMEDA	BURI BURI
ARROYO DE LA LAGUNA	BUTANO
ARROYO DE LAS NUECES Y BOLBONES	CABEZA DE SANTA ROSA
ARROYO DEL RODEO	CAHUENGA
ARROYO GRANDE	CALLEGUAS
ARROYO SECO	CAMARITAS IN SAN FRANCISCO
ARROYO SECO--TORRE	CAMPO DE LOS FRANCESES
ASUNCION	CANADA DE CAPAY
ATASCADERO	CANADA DE GUADALUPE VISITACION Y RODEO VIEJO
AUSAYMAS Y SAN FELIPE	CANADA DE GUADALUPE Y RODEO VIEJO
AZUSA--DALTON	CANADA DE HERRERA
AZUSA--DUARTE	CANADA DE JONIVE
BALLONA	CANADA DE LA CARPENTERIA
BLUCHER	CANADA DE LA SEGUNDA
BOCA DE LA PLAYA	CANADA DE LOS ALISOS

Standards for USGS & USDA Forest Service Single Edition Quadrangle Maps
Part 5: Public Land Survey System
Appendix 5-C: Named Land Grants

CANADA DE LOS CAPITANCILLOS	CORRAL DE TIERRA--MCCOBB
CANADA DE LOS COCHES (inside EL CAJON)	CORRAL DE TIERRA--PALOMARES
CANADA DE LOS NOGALES	CORRAL DE TIERRA--VASQUEZ
CANADA DE LOS OSOS Y PECHO Y ISLAY	CORTE DE MADERA DEL PRESIDIO
CANADA DE LOS PINOS OR COLLEGE RANCHO	CORTE MADERA DE NOVATO
CANADA DE LOS VAQUEROS	COSUMNES
CANADA DE PALA	COTATE
CANADA DE POGOLIMI	CUCA OR EL POTRER
CANADA DE RAYMUNDO	CUCAMONGA
CANADA DE SALSIPUEDES	CUYAMA--CESARIO LATAILLADE
CANADA DE SAN FELIPE Y LAS ANIMAS	CUYAMA--M A DE LA G Y LATAILLADE
CANADA DE SAN MIGUELITO	CUYAMACA
CANADA DE SAN VICENTE Y MESA DEL PADRE BARONA	DEL PASO
CANADA DE VERDE Y ARROYO DE LA PURISIMA	EL ALISAL--BERNAL
CANADA DEL CORRAL	EL ALISAL--HARTNELL
CANADA DEL CORTE DE MADERA	EL CAJON
CANADA DEL HAMBRE Y LOS BOLSAS	EL CHAMISAL
CANADA DEL RINCON EN EL RIO SAN LORENZO	EL CHORRO
CANADA LARGA O VERDE	EL CONEJO
*CANAL RANCH	EL CORTE DE MADERA
CANON DE SANTA ANA	EL ENCINO
CAPAY	EL ESCORPIO
CARNE HUMANA	EL PESCADERO--GRIMES
CASLAMAYOMI	EL PESCADERO--JACK
CASMALIA	EL PESCADERO--PICO AND NAGLEE
CASTAC	EL PIOJO
CATACULA	EL POTRERO DE SAN CARLOS
CAYMUS	EL POTRERO DE SANTA CLARA
CHIMILES	EL PRIMER CANON
CHOLAME	EL RINCON
CHUALAR	EL RINCON--ARELLANES
CIENEGA DE LOS PAICINES	EL SOBRANTE
CIENEGA DEL GABILAN	EL SOBRANTE DE SAN JACINTO
CIENEGA O PASO DE LA TIJERA	EL SUR
*COCHIL DEHE RANCHERIA	EL TEJON
COLLAYOMI	EL TORO
COLUSA	EL TUCHO
CORRAL DE PIEDRA	EMBARCADERO DE SANTA CLARA
CORRAL DE QUATI	ENCINAL Y BUENA ESPERANZA
	ENTRE NAPA
	ESQUON
	ESTERO AMERICANO
	EX-MISSION DE SAN FERNANDO

Standards for USGS & USDA Forest Service Single Edition Quadrangle Maps
Part 5: Public Land Survey System
Appendix 5-C: Named Land Grants

EX-MISSION SAN BUENAVENTURA LANDS OF	LA JOTA
EX-MISSION SAN DIEGO 3 TR AT--CH PR	LA LAGUNA SECA
EX-MISSION SAN JOSE	LA LAGUNA--GUTIERREZ
EX-MISSION SAN JUAN CAPISTRANO # TR	LA LAGUNA--STEARNS
AT	LA LIEBRE
EX-MISSION SAN LUIS REY 4 TRACTS	LA MERCED
EX-MISSION SOLEDAD	LA MISSION VIEJA DE LA PURISMA
FELIZ	LA NACION
FERNANDEZ	LA NATIVIDAD
GERMAN	LA POLKA
GUADALASCA	LA PUENTE
GUADALUPE	LA PURISIMA CONCEPCION
GUADALUPE Y LLANITOS DE LOS CORREOS	LA SIERRA--SEPULVEDA
*GUADALUPE Y LLANITOS DE LOS CORREOS	LA SIERRA--YORBA
GUAJOME	LA ZACA
GUEJITO	LAC
GUENOC	LAGUNA
GUESISOSI	LAGUNA DE LA MERCED
HONCUT	LAGUNA DE LAS CALABASAS
HUASNA	LAGUNA DE LOS PALOS COLORADOS
HUERHUERO	LAGUNA DE SAN ANTONIO
HUERTA DE ROMUALDO	LAGUNA DE TACHE
HUERTO DE CUATI	LAGUNA SECA
HUICHICA	LAND 1000 VARAS SQ--SEXTON
JACINTO	LARKINS CHILDRENS RANCHO
JAMACHO	LAS ANIMAS
JAMES MEADOWS TRACT	LAS AROMITAS Y AGUA CALIENTE
JAMUL	LAS BAULINES
JESUS MARIA	LAS BOLSAS
JIMENO	LAS CIENEGAS
JOHNSON RANCHO	LAS CIENEGAS
JUAN SILVAS	LAS CRUCES
JURISTA	LAS FLORES
JURUPA--ROUBIDEAU	LAS JUNTAS
JURUPA--STEARNS	LAS MARIPOSAS
LA BARRANCA COLORADA	LAS POSAS
LA BOCA DE LA CANADA DEL PINOLE	LAS POSITAS
LA BOLSA CHICA	LAS POSITAS Y LA CALERA
LA BREA	LAS PUTAS
LA CANADA	LAS SALINAS
LA CARBONERA	LAS UVAS
LA GOLETA	LAS VIRGENES
LA HABRA	*LITTLE TEMECULA

Standards for USGS & USDA Forest Service Single Edition Quadrangle Maps
 Part 5: Public Land Survey System
 Appendix 5-C: Named Land Grants

LLANO DE BUENA VISTA	MALLACOMES Y PLAN DE AGUA CALIENTE
LLANO DE SANTA ROSA	MESA DE OJO DE AGUA
LLANO DEL TEQUISQUITA	MILPITAS
LLANO SECO	MILPITAS--ALVISO
LOCOALLOMI	MIRAMONTES
LOMAS DE LA PURIFICACION	MISSION CARMELOCHORRO
LOMAS DE SANTIAGO	MISSION DOLORES
LOMERIAS MUERTAS	MISSION DOLORES
LOMPOC	MISSION DOLORES 50 VARA LOT IN DE HARO
LOS ALAMOS	MISSION DOLORES SUERTE IN
LOS ALAMOS Y AGUA CALEINTE	MISSION DOLORES--BERNAL
LOS ALIMITOS	MISSION LA PURISMA
LOS ANGELES CITY LANDS OF	MISSION LA PURISMA (in Santa Barbara
LOS CAPITANCILLOS	County)
LOS CARNEROS--LITTLEJOHN	*MISSION LANDS (in San Luis Obispo County)
LOS CARNEROS--MCDUGAL	MISSION OF SANTA YNEZ
LOS CERRITOS	MISSION SAN ANTONIO
LOS COCHES (in Monterey County)	MISSION SAN BUENAVENTURA
LOS COCHES (in Santa Clara County)	MISSION SAN DIEGO
LOS CORRALITOS	*MISSION SAN DIEGO DE ACALA
LOS COYOTES	MISSION SAN FERNANDO
LOS DOS PUEBLOS	MISSION SAN GABRIEL
LOS ENCENITOS	MISSION SAN JOSE
LOS FELIS	MISSION SAN JUAN BAUTISTA
LOS GATOS OR SANTA RITA	MISSION SAN JUAN CAPISTRANO 5 TR AT
LOS GUILICOS	MISSION SAN MIGUEL
LOS HUECOS	*MISSION SAN RAFAEL
LOS LAURELLES--BERONDA	MISSION SANTA BARBARA
LOS LAURELLES--RANSOM	MISSION SOLEDAD
LOS MEDANOS	MISSION VIEJO OR LA PAZ
LOS MEGANOS	MOLINOS
LOS NOGALES	MONSERATE
LOS OJITOS	MONTE DEL DIABLO
LOS PALOS VERDES	MONTEREY CITY
LOS PENASQUITOS	MONTEREY COUNTY--CASTRO
LOS PRIETOS Y NAJALAYEGUA	MONTEREY COUNTY--COCKS
LOS PUTOS	MORO Y CAYUCOS
LOS TULARCITOS--GOMEZ	MUNIZ
LOS ULPINOS	MUSCUPIABE
LOS VALLECITOS DE SAN MARCOS	NACIONAL
LOS VERGELES	NAPA
LOT MISSION SAN BUENAVENTURA	*NAVAJO
MALLACOMES OR MORISTUL	NEW HELVETIA

Standards for USGS & USDA Forest Service Single Edition Quadrangle Maps
 Part 5: Public Land Survey System
 Appendix 5-C: Named Land Grants

NICASIO LANDS	*POTRERO LOS PINOS
NIGUEL	POTRERO Y RINCON DE SAN PADRO DE REGLADO
NIPOMO	POTREROS SAN JUAN CAPISTRANO
NOCHE BUENA	PROSPERO TRACT
NOJOQUI	PROVIDENCIA
NOVATO	*PUEBLO LANDS OF SAN DIEGO
NUESTRA SENORA DEL REFUGIO	PUEBLO LANDS OF SAN FRANCISCO
OJAI	PUEBLO LANDS OF SAN JOSE
OJO DE AGUA DE FIGUEROA S F	PUEBLO LANDS OF SANTA BARBARA
OJO DE AGUA DE LA COCHE	PUEBLO LANDS OF SONOMA
OLOMPALI	PUEBLO LOT NO 6
OMOCHUMNES	PULGAS
ONE SUERTE	PUNTA DE LA CONCEPCION
ORESTIMBA	PUNTA DE LA LAGUNA
OTAY--DOMINGUEZ	PUNTA DE LOS REYES--RANDALL
OTAY--ESTUDILLO	PUNTA DE LOS REYES--SOBRANTE
PALA	PUNTA DE PINOS
PANOCHE DE SAN JUAN Y LOS	PUNTA DE QUENTIN
CARRISALITOS	PUNTA DEL ANO NUEVO
PARAJE DE SANCHEZ	QUITO
PASO DE BARTOLO--GUIRADO	RANCHERIA DEL RIO ESTANISLAO
PASO DE BARTOLO--MCFARLAND & DOWNEY	RANCHITA DE SANTA FE
PASO DE BARTOLO--PICO	RANCHO AGUAS NIEVES
PASO DE BARTOLO--SEPULVEDA	RANCHO DE FARWELL
PASO DE ROBLES	RANCHO DEL PUERTO
PASTORIA DE LAS BORREGAS	REAL DE LAS AGUILAS
PAUBA	REFUGIO
PAUMA	RESSIGHINI
*PESCADERO	RINCON DE LA BREA
PETALUMA	RINCON DE LA PUENTE DEL MONTE
PIEDRA BLANCA	RINCON DE LAS SALINAS
PINOLE	RINCON DE LAS SALINAS Y POTRERO VIEJO
PISMO	RINCON DE LOS BUEYES
PLEYTO	RINCON DE LOS CARNEROS
POTRERO CHICO	RINCON DE LOS ESTEROS--ALVISO
POTRERO GRANDE	RINCON DE LOS ESTEROS--BERREYESA
POSA DE LOS OSITOS	RINCON DE LOS ESTEROS--WHITE
POSOLMI	RINCON DE MUSALACON
POTRERO DE FELIPE LUGO	RINCON DE SAN FRANCISQUITO
*POTRERO DE LA CIENEGA	RINCON DE SANJON
POTRERO DE LOS CERRITOS	RINCON DEL DIABLO
POTRERO DE SAN LUIS OBISPO	RINCONADA DE LOS GATOS
*POTRERO EL CARISO	RINCONADA DEL ARROYO DE SAN FRANCISQUITO

Standards for USGS & USDA Forest Service Single Edition Quadrangle Maps
 Part 5: Public Land Survey System
 Appendix 5-C: Named Land Grants

RIO DE LOS AMERICANOS	SAN GABRIEL TR NR--WHITE
RIO DE LOS MOLINOS	SAN GERONIMO (in Marin County)
RIO DE LOS PUTOS	SAN GERONIMO (in San Luis Obispo County)
RIO DE SANTA CLARA	SAN GREGORIO--CASTRO
RIO JESUS MARIA	SAN GREGORIO--RODRIGUEZ
ROBLAR DE LA MISERIA	SAN JACINTO VIEJO
S F SOLAND IN SONOMA MISSION	SAN JACINTO & SAN GORGONIO TRACT BETWEEN
SALSIPUEDES	SAN JACINTO NUEVO Y POTRERO
SAN ANDRES	SAN JOAQUIN (in Orange County)
SAN ANTONIO OR PESCADERO	SAN JOAQUIN (in San Benito County)
SAN ANTONIO OR RODEO DE LAS AGUAS	SAN JOSE ADDITION TO
SAN ANTONIO--A M PERALTA	SAN JOSE DE BUENOS AYRES
SAN ANTONIO--LUGO	SAN JOSE DEL VALLE
SAN ANTONIO--MESA	SAN JOSE Y SUR CHIQUITO
SAN ANTONIO--V & D PERALTA	SAN JOSE--DALTON ET AL
SAN ANTONIO--Y PERALTA	SAN JOSE--PACHECO
SAN AUGUSTIN	SAN JUAN
SAN BENITO	SAN JUAN BAUTISTA
SAN BERNABE	SAN JUAN BAUTISTA TR NR
SAN BERNARDINO	SAN JUAN BAUTISTA--BREEN
*SAN BERNARDINO	SAN JUAN CAJON DE SANTA ANA
SAN BERNARDO--CANE	SAN JULIAN
SAN BERNARDO--SNOOK	SAN JUSTO
SAN BERNARDO--SOBERANES	SAN LEANDRO
SAN BUENA VENTURA	SAN LORENZO--CASTRO
SAN CARLOS DE JONATA	SAN LORENZO--RANDALL
SAN DIEGO ISLAND OR PENINSULA	SAN LORENZO--SANCHEZ
SAN DIEGO PUEBLO LANDS OF	SAN LORENZO--SOBERANES
SAN DIEGUITO	SAN LORENZO--SOTO
SAN EMIDIO	SAN LUCAS
SAN FRANCISCO	SAN LUIS GONZAGA
SAN FRANCISCO	SAN LUIS OBISPO MISSION
SAN FRANCISCO DE LAS LLAGAS	SAN LUISITO
SAN FRANCISCO--DALTON	SAN MARCOS
SAN FRANCISQUITO	SAN MATEO
SAN FRANCISQUITO--RODRIGUEZ	SAN MIGUEL--NOE
SAN GABRIEL TR NR--AGUILAR	SAN MIGUEL--OLIVAS & LORENZANA
SAN GABRIEL TR NR--COURTNEY	SAN MIGUEL--WEST
SAN GABRIEL TR NR--DOMINGO	SAN MIGUELITO (in Monterey County)
SAN GABRIEL TR NR--LEDESMA	SAN MIGUELITO (in San Luis Obispo County)
SAN GABRIEL TR NR--SALES	SAN PABLO
SAN GABRIEL TR NR--SEXTON	SAN PASCUAL--GARFIAS
SAN GABRIEL TR NR--SIMEON	SAN PASCUAL--WILSON

Standards for USGS & USDA Forest Service Single Edition Quadrangle Maps
Part 5: Public Land Survey System
Appendix 5-C: Named Land Grants

SAN PEDRO SANTA MAGARITA Y LAS GALLINAS	SANTA ROSA--COTA
SAN PEDRO--DOMINGUEZ	SANTA ROSA--ESTRADA
SAN PEDRO--SANCHEZ	SANTA ROSA--MORINO
SAN RAFAEL	SANTA TERESA
SAN RAFAEL	SANTA YSABEL (in San Diego County)
SAN RAMON--AMADOR	SANTA YSABEL (in San Luis Obispo County)
SAN RAMON--CARPENTIER	SANTIAGO DE SANTA ANA
SAN RAMON--NORRIS	SAUCCELITO
SAN SIMEON	SAUCITO
*SAN VICENTE	SAUCOS
SAN VICENTE Y SANTA MONICA	SAUSAL
SAN VICENTE--BERREYESA	SAUSAL REDONDO
SAN VICENTE--ESCARRILLA	SESPE
SAN VICENTE--MUNRASS	SHOQUEL
SAN YSIDRO--GILROY	SHOQUEL AUGMENTATION
SAN YSIDRO--ORTEGA	SIMI
SANEL	SISQUOC
SANJON DE LOS MOQUELUMNES	SOLIS
SANJON DE SANTA RITA	SONOMA CITY LOT IN
SANTA ANA	SOTOYOME
SANTA ANA DEL CHINO	SOULAJULE LANDS
SANTA ANA DEL CHINO ADDITION	STANISLAUS RIVER
SANTA ANA Y QUIEN SABE	SUEY
SANTA ANITA	SUISUN
SANTA CATALINA ISLAND	TAJAUTA
SANTA CLARA COUNTY--BENNETT	TEMASCAL
SANTA CLARA DEL NORTE	TEMECULA
SANTA CLARA MISSION TR	TEPUSQUET
SANTA CLARA TR NR--ENRIGHT	TEQUEPIS
SANTA CRUZ ISLAND OF	TINAQUAIC
SANTA CRUZ MISSION	TODOS SANTOS Y SAN ANTONIO
*SANTA GERTRUDES	TOLENAS
SANTA GERTRUDES--COLIMA	TOMALES Y BAULINES--GARCIA
SANTA GERTRUDES--MCFARLAND & DOWNEY	TOMALES Y BAULINES--PHELPS
SANTA MANUELA	TOPANGA MALIBU SEQUIT
SANTA MARGARITA	TRABUCO
SANTA MARGARITA Y LAS FLORES	TRES OJOS DE AGUA
SANTA PAULA Y SATICOY	TUJUNGA
SANTA RITA	TULARCITOS--HIGUERA
SANTA RITA--MALO	TULUCAY
*SANTA ROSA	TWO SUERTES
SANTA ROSA ISLAND OF	TZABACO
	ULISTAC

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VALLE DE PAMO OR SANTA MARIA	YAJOME
VALLE DE SAN FELIPA	YERBA BUENA
VALLE DE SAN JOSE--PORTILLA	YOKAYA
VALLE DE SAN JOSE--SUNOL & BERNAL	YOSEMITE & BIG TREE GRANTS
VALLEY O TEMECULA	ZANJONES
VEGA DEL RIO DEL PAJARO	ZAYANTA

COLORADO

BEAUBIEN AND MIRANDA	SANGRE DE CRI. ²
DURANGO RESRV	SANGRE DE CRISTO ²
LUIS MARIA B. ¹	TIERRA AMARILLA
LUIS MARIA BACA NO. 4 ¹	VIGIL AND SAINT VRAIN
MONTROSE RES	VIGIL AND SAINT VRAIN NO. 6
NOLAN GRANT	ZAPATO

¹ These are probably the same grant but entered in the land records with two different representations.

² These are probably the same grant but entered in the land records with two different representations.

FLORIDA

AMBROSE HULL	HANSON
ANTELM GAY	JANE MURRAY
ARREDONDO GRANT	JOHN BOLTON
BERNARDO SEGUI	JOHN H McINTOSH
C E MCHARDY	JOHN LOW
CHARLES SIBBOLD	JOSEPH GAUNT
DELESPINE GRANT	JOSEPH WALES
DOMINGO ACOSTA	LUCAS CRAYON
FLEMING GRANT	MOSES E LEVY
FORBES PURCHASE	PABLO ROSETTE
GEORGE F CLARK	PETER FOUCHARD
GERONIMO ALVAREZ	SAMUEL BETTS
GOMEZ	WILLIAM GARVIN
H M GOMEZ	

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NEW MEXICO

*ACOMA PURCHASE	CASA COLORADA
AGUA NEGRA	CEBOLLA
AGUA SALADA	CEBOLLETA
ALAMEDA	CHILILI
ALAMITOS	CIENEGUILLA
ALEXANDER VALLEY	CRISTOVAL DE LA SERNA
ANGOSTURA	CUBERO
ANTOINE LEROUX	CUYAMUNGUE PUEBLO
ANTON CHICO	DABOLOS
ANTONIO ARMENTA	DONA ANA BEND COLONY
ANTONIO CHAVEZ	*EL RANCHITO GRANT
ANTONIO DE ABEYTA	*EL RITO
ANTONIO GUTTIEREZ AND JOAQUIN SEDILLO	ELENA GALLEGOS
ANTONIO MARTINEZ	ESTANCIA
ANTONIO ORTIZ	FELIPE TAFOYA
ANTONIO SALAZAR	FERNANDO DE TAOS
ANTONIO SEDILLO	FRANCISCO MONTES VIGIL
ARROYO HONDO	GALISTEO
ARROYO SECO	GASPAR ORTIZ
BACA LOCATION NUMBER ONE	GIJOSA
BACA LOCATION NUMBER TWO	GOTERA
BACA Y PINO	IGNACIO CHAVEZ
BALTHAZAR BACA	IGNACIO SANCHEZ VERGASA
BARTOLOME FERNANDEZ	JACONA
BARTOLOME SANCHEZ	JOAQUIN MESTAS
*BEAUBIEN & MIRANDA--MAXWELL	JOHN SCOLLY
BELEN	JOSE F BACA Y TERRUS
BENJAMIN EDWARDS	JOSE MANUEL SANCHEZ BACA
BERNABE MONTANO	JOSE PEREA
BERNALLILO	JOSE SUTTON
BISHOP JOHN LAMY	JOSE TRUJILLO
BLACK MESA	JUAN BATISTA VALDEZ
BOSQUE DEL APACHE	JUAN DE GABALDON
BRAZITO	JUAN DE MESTAS
CAJA DEL RIO	JUAN JOSE LOBATO
CANADA DE COCHITI	*JUAN OTERO GRANT
CANADA DE LOS ALAMOS	LA MAJADA
CANON DE CARNUE	LA SALINA
CANON DE CHAMA	LAGUNA PUEBLO
CANON DE SAN DIEGO	*LAS TRAMPAS GRANT
CANON DEL AGUA	LAS TRUCHAS

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LAS VEGAS	PUEBLO OF NAMBE
LO DE PADILLA	PUEBLO OF PICURIS
LOS CERRILLOS	PUEBLO OF POJOAQUE
LOS FRIJOLES	PUEBLO OF SAN FELIPE
LOS TRIGOS	PUEBLO OF SAN ILDEFONSO
LUIS ARMENTA	PUEBLO OF SAN JUAN
M AND S MONTOYA	PUEBLO OF SANDIA
MANZANO	PUEBLO OF SANTA ANA
MARQUEZ AND PADILLA	PUEBLO OF SANTA ANA
MAXWELL	PUEBLO OF SANTA CLARA
MESILLA CIVIL COLONY	PUEBLO OF SANTO DOMINGO
MESITA DE JUANA LOPEZ	PUEBLO OF TAOS
MORA	PUEBLO OF TESUQUE
NERIO ANTONIO MONTOYA	PUEBLO OF ZIA
NICOLAS DURAN DE CHAVEZ	PUEBLO OF ZUNI
NOLAN	PUEBLOS OF SANTO DOMINGO AND SAN FELIPE
NUESTRA SENORA DE LA LUZ DE LAS LAGUNITAS	RAMON VIGIL
NUESTRA SENORA DEL ROSARIO SAN FERNANDO	RANCHO DEL RIO GRANDE
OJO CALIENTE	RANCHO EL RIJO
OJO DE LA CABRA	REFUGIO COLONY
OJO DE SAN JOSE	RIO COLORADO
OJO DEL BORREGO	RIO DE TESUQUE
OJO DEL ESPIRITU SANTO	RITO DE LOS
ORTIZ MINE	ROGUE LOVATO
PABLO MONTOYA	SALVADOR GONZALES
PACHECO	SAN ANTONIO DE LAS HUERTAS
PAGUATE PURCHASE	SAN ANTONIO DEL RIO COLORADO
PAJARITO	SAN CLEMENTE
PECOS PUEBLO	SAN CRISTOVAL
PEDRO ARMENDARIS	SAN JOAQUIN DEL NACIMIENTO
PENA BLANCA	SAN MARCOS PUEBLO
PETACA	SAN MATEO SPRINGS
PIEDRE LUMBRE	SAN MIGUEL DEL BADO
PLAZA BLANCA	SAN PEDRO
PLAZA COLORADA	SAN YSIDRO
POLVADERA	SANGRE DE CRISTO
PRESTON BECK	SANTA ANA
PUEBLO OF ACOMA	SANTA BARBARA
PUEBLO OF COCHITI	SANTA CLARA PUEBLO
PUEBLO OF ISLETA	SANTA CRUZ
PUEBLO OF JEMEZ	SANTA ROSA DE CUBERO
	SANTA TERESA
	SANTE FE

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SANTIAGO RAMIREZ	TEJON
SANTO DOMINGO DE CUNDIYO	TIERRA AMARILLA
SANTO TOMAS DE YTURBIDE	TOME
SEBASTIAN DE VARGAS	TORREON
SEBASTIAN MARTIN	TOWN OF ABIQUI
SERAFIN RAMIREZ	TOWN OF ALAMEDA
SEVILLETA	TOWN OF ALBUQUERQUE
*SHO 1235	TOWN OF ATRISCO
*SHO 1898	TOWN OF CHIMITA
SIERRA MOSCA	TOWN OF LAS TRAMPAS
SITIO DE JUANA LOPEZ	TOWN OF TECOLATE
SITIO DE LOS CERRILLOS	TOWN OF TEJON
SOCORRO	UNA DE GATO
TAJIQUE	VALLECITO
TALAYA HILL	ZIA SANTA ANA AND JEMEZ
TECOLOTE	