This “extra learning module” is intended to give the realty specialist and others working with land ownership an understanding of a few primary boundary law principles. These are the fundamental rules agency land surveyors apply when evaluating land descriptions and survey data for projects and transactions which occur near or adjacent to federal land boundaries.
The objectives of this module are to help you: describe Common Law practices and the Statute of Frauds, explain Junior/Senior Rights, summarize the Priority of Calls, identify additional boundary location principles, and compare and contrast water boundary terms.
After completing this lesson, you should be able to: comprehend Common Law practices and describe the Statute of Frauds principles.

If you have taken the Interpreting and Writing Descriptions of Land course, you learned that along with the metes-and-bounds system of survey, American colonists brought with them the primarily English concepts of land ownership and land title. The legal framework for land ownership and property rights originates from English Common Law. Common law, also known as case law, is law developed by judges through decisions of courts that decide individual cases, as opposed to statutes adopted through the legislative process or regulations issued by the executive branch of a government.
Under English Common Law, the Statute of Frauds relates to land ownership with the basic principle that a valid conveyance of land title must be in writing. In broader terms, the Statute of Frauds protects against false claims in contractual matters, including the buying and selling of land.
Once federal government land has passed in ownership to states or individuals, laws regarding land title and parcel boundaries have largely developed through common law and statutory law within the individual states.

However, there is federal survey law related to land boundaries surveyed under the Public Land Survey System (PLSS). Guidance for the survey and resurvey of PLSS land is found in the Bureau of Land Management’s “Manual of Surveying Instructions.”

SkillCheck

True or False: Common law is statutes adopted through the legislative process or regulations issued by the executive branch of a government.

- A. True
- B. False

Correct Answer: False
Lesson 2: Boundary Law Principles

Objectives

After completing this lesson, you should be able to:

- Explain Junior/Senior Rights
- Relate the correct order regarding Priority of Calls
- Describe the fundamental concepts of unwritten rights and boundary agreements.

After completing this lesson, you should be able to: explain Junior/Senior Rights, relate the correct order regarding Priority of Calls, and describe the fundamental concepts of unwritten rights and boundary agreements.
When an overlap of land rights or boundary conflict created by written documents occurs, this becomes a special boundary problem commonly referred to as Junior/Senior Rights. Here the word “Senior” means first in time and “Junior” means second to or later in time. In the eyes of the law, there is no anticipation in the system of rectangular surveys that an overlap or gap would occur. However, once land has passed from Federal ownership and are further divided by private interests, or in those states where the colonial system is used, these conflicts do exist. These conflicts need to be resolved because all must have an ownership and there is no such thing as “no-man’s land.” It is not possible for two different persons to hold a clear free title to the same tract of land. Junior/Senior Rights conflicts are rarely apparent based on the written land description. They are usually only found by close examination of the subject lands’ description and comparing that to the adjoining land description. Sometimes, Junior/Senior Rights conflicts are only discovered by survey of the property, which uncovers faulty measurements or other errors in the records or on the ground. However, you need to be able to recognize such conflicts can exist to seek a solution to a problem, and to avoid creating a conflict when preparing a land description.

The guiding principle for Junior/Senior Rights is a simple one. The first owner gets full rights to what was conveyed to him or her, as stated in the description of the land in the deed or patent document. Because that is a Senior right, any overlaps created by subsequent written documents are Junior and must yield to the first grant.
To give you a better idea of how this works, let's work through a scenario. Mr. Adams owns a 10-acre square piece of property, described in his deed as: “a portion of the northeast quarter of the northeast quarter of section 14, containing 10 acres more or less, as shown in that certain survey plat dated June 9, 1957, recorded in book 12, page 14 of the County Recorder’s Office. He is in need of some money so he sells half of his land to Mr. Brown. To save the expense of a survey, Mr. Adams hires the local injury lawyer to draft the land description to be used in the deed of conveyance. The attorney knows just enough about land descriptions to be dangerous. He crafts the land description as: “Being the West 330 feet of the Adams Parcel in the northeast quarter of the northeast quarter of section 14, containing 5 acres, more or less."

That divides the land in half right? Wrong! The new deed is filed with the County Recorder and sent to the County Assessor’s office to update the tax rolls. The assessor, with no new survey data, assumes both parcels to be 5 equal acres and shows the parcels on the county tax maps as AP#1103 A and AP#1103 B. That divided the land exactly in half, right? Probably not.
A couple of years later, Mr. Adams decides to move closer to family in another state and he sells his remaining land to Mr. Cross. Mr. Adams’ lawyer writes the land description in the deed to say; The East half of the Adams Parcel shown as Assessor’s parcel AP#1103 B, containing 5 acres of land, more or less.

Mr. Cross wants to put cattle on his land and therefore he needs to put up a fence between him and Mr. Brown. So, Mr. Cross schedules a land survey to be completed to mark off his property lines.
The surveyor obtains a copy of the original survey plat recorded in book 12, page 14 of the County Recorder’s Office and during the course of the field work, finds the original corners set in 1957. The new survey shows the property owned by Mr. Adams is actually only 8.6 acres and not 10 acres. So do the new owners just split the difference and own 4.3 acres each? The answer is NO, because you can’t sell what you don’t own which is a well-established principle under the Statute of Frauds.

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So, does Mr. Brown really have 5 acres of the original 8.6 acres leaving Mr. Cross with only 3.6 acres? The answer is ACTUALLY NO. His deed is first in time so he has the Senior Right and Mr. Cross’ title has Junior Right.
To fully understand this scenario, we will apply the Priority of Calls. You will see how the recorded surveys and corner monuments determine the final outcome. But keep in mind Mr. Brown’s deed is first in time, so he has the Senior Right and Mr. Cross’ title has Junior Right.

Elements of a Metes-and-Bounds Survey:
- Controlling elements with importance and hierarchy
- Must become familiar with these as the retracing land surveyor
- Understanding controlling elements and their order of importance enables you to prepare the description of land with clear intent

Hierarchy Called:
- Rules of Construction
- Priority of Calls

In the Metes-and-Bounds module of the Descriptions of Land course, we discuss the elements of a metes-and-bounds survey which are incorporated into the description. These controlling elements within a description have importance and hierarchy in their use. You should become as familiar with these as the retracing land surveyor. If you understand the controlling elements and their order of importance, you will be able to prepare the description of land with clear intent. In law, this hierarchy is often called the rules of construction, or the Priority of Calls.
The Priority of Calls is in place to determine the intent of the description of land when there are conflicting elements. In order of most important to least important are: Natural objects such as rivers, mountains, and ridges; artificial objects like monuments, surveyor marks, and man-made improvements; distances of linear measurement is next followed by bearings of direction; and acreage or quantity. Let’s continue with the scenario and see how the Priority of Calls works.

Mr. Adams originally buys his land in 1957. In this example, we can consider this the origin of the land title and the original survey. The survey plat becomes the official document and delimits by physical monuments the land Mr. Adams has clear title to owning.
Using the Priority of Calls, does the survey description call for: Natural objects... NO; Artificial objects... YES, the original surveyor set the corner monuments; Distances of linear measurement... YES; Bearings of direction... NO; Acreage... YES

So what does Mr. Adams own? He owns all of the land inside the four survey monuments regardless of distance, bearing, or acreage in the land description. Remember, the new survey found the original corners from 1957, but found differences in the measurements.
Now let's take a look at what Mr. Brown purchased and apply the Priority of Calls. The land description states: … the West 330 feet of the Adams parcel in the northeast quarter of the northeast quarter of section 14, containing 5 acres, more or less. Does this land description have: Natural objects… NO; Artificial objects… NO, but it cannot go outside of Mr. Adams’ original four corners, because you can't sell what you don't own!; Distances of linear measurement… YES; Bearings of direction… NO; Acreage… YES

So what does Mr. Brown own? The West 330 feet of the Adams Parcel, which is shown by the measurements of the new survey DOES NOT contain 5 acres. If it was really Mr. Adams’ intent to sell half of his property to Mr. Brown, he would have done so if the land description had said “the west 1/2” instead of “the west 330 feet.”
Finally, let's look at what Mr. Cross purchased. ... the East half of the Adams Parcel shown as Assessor’s parcel AP#1103 B, containing 5 acres of land, more or less. Please note that the Assessor’s map is only a depiction, not a legal document as referencing a land survey would be. Applying the Priority of Calls, does this land description have: Natural objects... NO; Artificial objects... NO, but it cannot go outside of Mr. Adams’ original four corners; Distances of linear measurement... NO; Bearings of direction... NO; Acreage... YES

So why doesn’t Mr. Cross get 5 acres? Mr. Adams didn’t have 5 acres left to sell. Mr. Adams’ boundary was described by the 1957 survey, which established the property corners. But a modern survey found there really wasn’t 10 acres within the four corners. Mr. Brown’s land, senior in title, gets the full 330 feet called for in his land description. But, not 5 acres based on the precedence of the Priority of Calls. Mr. Cross with Junior title then gets what’s left within Mr. Adams’ original property.
Let's take a few moments to discuss survey measurements when “more or less” is added to a land description. For the non-surveyor, it's important to consider field measurements are never “perfect.” The accuracy and precision of distances and directions reported on survey plats and land descriptions are influenced by the technology used, terrain encountered, and the diligence of the practitioner. You may have heard it said, “Oh those darn surveyors moved the corner again!” This is never really true.

A new survey, called a resurvey or retracement survey, is just reporting a different value than that of the original surveyor. The monument is still in the exact same spot on the earth.
In the case of a corner monument being destroyed, the surveyor uses the prescribed methods of reestablishment found within The Manual of Surveying Instructions or other legal principles. Rarely would these results match the original surveyor’s measurements exactly number for number. A surveyor’s record bearing and distance should not be considered an absolute, finite value, but a means to find the corner monument.

This is why physical survey monuments take precedence over distance and direction in the Priority of Calls. Now, consider acreage is an expression of the land area contained within a surveyed parcel. Acreage is actually a calculation based on survey measurements of square feet divided by 43,560 equals acres.
Federal Description of Land Discourages Use

... 40.15 acres more or less...

Physical monuments take precedence over distance and direction in Priority of Calls.

So if the boundary measurements themselves cannot be considered perfect or absolute using words such as “containing 40.15 acres more or less” makes a certain degree of sense. However in Federal description of land, the use of “more or less” is discouraged.

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Typical Analysis to Establish a Defensible Boundary

Priority of Calls

- Natural objects
- Artificial objects
- Distances of linear measurement
- Bearings of direction
- Acreage

This is a typical analysis a land surveyor must apply before he or she can confidently establish or reestablish a legal and defensible boundary. So understanding the Priority of Calls is VERY important when writing or interpreting descriptions of land. But, the most important thing to remember about the Priority of Calls is monuments, natural or artificial, prevail over all other elements including measurements.
And this is why the Land Surveyor spends so much time searching for the original corner monuments.

Ownership Rights Affecting Boundaries Beyond Written Words in Legal Documents

 Realty specialists and others who interpret descriptions of land should be aware there can be ownership rights that affect boundaries beyond that which is derived from the written words in descriptions and legal documents.
These are the principles of unwritten rights and boundary by agreement. Unwritten rights and boundary agreements are a mixture of survey principles and law. Here is an overview of the fundamental concepts. If you have experience working with land ownership and title, you probably have heard terms such as “adverse possession” and “prescriptive rights.” These terms are often associated with unwritten rights. Unwritten rights in regard to land ownership are rights that may have accrued through the actual use or possession of the land that cannot be found by examining documents of record. “Acquiescence” and “practical location” are terms often associated with boundary agreements which may not be of record. However, they can have the force of law in some situations.

Actual use, like roads, and apparent occupation, such as fences and other improvements, are intrinsic evidence that unwritten rights or a boundary agreement may exist.
BLM: The Basics of Boundary Law Study Guide

<table>
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<tr>
<th>Unwritten Rights</th>
<th>Boundary Agreements</th>
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<tr>
<td>&quot;Adverse Possession&quot;</td>
<td>&quot;Acquiescence&quot;</td>
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<td>&quot;Prescriptive Rights&quot;</td>
<td>&quot;Practical Location&quot;</td>
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<tr>
<td>Rights accrued from actual use or possession of the land</td>
<td>Have the force of law in some situations</td>
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**Considered in All Cases where Leaving Federal Ownership**

No Federal employee can enter into a boundary agreement on behalf of the government.

Since unwritten rights or boundary agreements may exist, they should be considered in all cases where subject properties have, at one time or another, left Federal ownership. However, no Federal employees have the authority to enter into a boundary agreement on behalf of the government.

**Exception: Metes-and-Bounds “thence along an old fence”**

Maintain healthy skepticism that existing fence lines represent true ownership boundary lines.

In regard to fences, personnel responsible for preparing Certificates of Inspection and Possession of land parcels should maintain a healthy skepticism that existing fence lines represent true ownership boundary lines. An exception to this may be found in metes-and-bounds land descriptions where words like “thence along an old fence” are used. But even then, it may be questioned if the fence there today is in the same place as the one referenced in the land description.
Your agency surveyor has specialized expertise in recognizing and researching potential unwritten rights and boundaries by agreement. Personnel preparing Certificates of Inspection and Possession of land parcels or similar work should consult with their surveyor when improvements are found in the vicinity of a boundary.

**SkillCheck**

Your field office is considering purchasing a parcel of land. The land description you are given to review is identical to the description in the original land patent (deed) dated 1908:

*T. 15 W. R. 12 E. sec. 10; SW1/4 NE1/4, containing 40.0 acres*

A BLM resurvey of this quarter quarter section finds private surveyors marks for all four corners that appear to be set properly, but calculates the acreage to be only 37.36 acres using the corners as the boundary. For appraisal purposes, what is most likely the true acreage contained within the parcel?

- [ ] A. 40 acres
- [x] B. 37.36 acres
- [ ] C. None of the above, an independent resurvey must be done.

Correct Answer: 37.36 acres
Lesson 3: Water Boundaries

After completing this lesson, you should be able to:

- Explain the principles of erosion, avulsion, accretion, reliction, and emergence.
Water boundaries are some of the most complicated issues that surveyors face. Understanding some of the special circumstances water boundaries create is important. In this lesson, we will cover some of the basics regarding erosion, avulsion, accretion, reliction, and emergence.

Reference: Marine Managed Areas or Manual of Surveying Instructions

Please note that if you come across a water boundary issue you need to get your localsurveyor involved. For additional information about water boundaries, please refer to the “Marine Managed Areas: Best Practices for Boundary Making” or the “Manual of Surveying Instructions.”
Let's first begin with the principle of erosion. Simply stated in Black's Law Dictionary, 5th Edition, erosion is the wearing away of land by the action of water, wind, or other elements. When dealing with erosion, there are two points to remember. Where there is a gradual and imperceptible \textbf{DECREASE} of land beside a body of water by way of erosion, the shoreline owner is deprived of uplands formerly held, as they no longer exist. Because the land no longer exists – the property boundaries change.

\textbf{Avulsion:} when there is a sudden and often violent change in a water course

\textbf{Avulsion:} when there is a sudden and often violent change in a water course. The classic example of avulsion is when floodwaters cut a new channel that separates a land formation from the shoreline. This can often be the case of normally slow-moving rivers which meander in oxbows. Avulsion occurs when fast-moving water, like during a flood, takes a short cut that changes the river’s channel. In cases of avulsion, the upland owner will generally retain ownership of the severed land.
Accretion is the opposite of erosion and is the gradual and imperceptible addition of soil. When dealing with accretion, there are two main points to remember. The first is that where there is a gradual and imperceptible INCREASE of land beside a body of water by way of accretion, the shoreline owner is the beneficiary of title to the newly formed uplands. The second is that boundaries move with the gradual and imperceptible actions of this natural process.

The last water principle to be covered is reliction. Reliction is the gradual and imperceptible UNCOVERING of existing soil by the recession of water. This generally happens in cases of drought. When dealing with reliction, there are two main points to remember. The first is that where there is a gradual and imperceptible INCREASE in land beside a body of water by way of reliction, the shoreline owner is beneficiary of title to resurfaced land. The second is that boundaries move with the natural process of reliction.
Another type of reliction is called emergence. This is where land that was previously covered by water “emerges” as the water level has receded. An example would be an island that “appears” in a lake or river due to a gradual lowering of the average water flow. Emergence may likely be the reason an island is now present but is not shown on the original government survey or land status records and is not an error in those records. However, emergence should not be confused with avulsion. In a river, an island that emerged would still have water flow on both sides of the land. In cases of avulsion, the old channel will likely dry up.

Correct Answers: The correct answers are Erosion – Wearing away of land by action of water, wind or other elements; Avulsion - A sudden and often violent change in a water course; Accretion – Shoreline owner is beneficiary of title to newly formed uplands; Reliction – Uncovering of existing soil by recession of water; and Emergence – Land previously covered by water emerges as the water level recedes.
It is often said the role of the modern surveyor is to “follow in the footsteps of the original surveyor.” It’s not the surveyor’s job to put a property corner where it should have been by the reported measurements, but rather find or reestablish it where it was. Our boundaries do not change based on a surveyor’s measurement. Beyond written words and measurements, sometimes boundaries do change due to natural forces, such as water boundaries. Boundaries may also be affected by society’s rules, such as Junior/Senior Rights, as well as actual use and possession which may provide evidence of ownership. And, that is the very basics of boundary law.

Having completed this module, you should now be able to: describe Common Law practices and the Statute of Frauds, explain Junior/Senior Rights, summarize the Priority of Calls, identify additional boundary location principles, and compare and contrast water boundary terms.
1. **Place the Priority of Calls in their proper order.**

   Correct Order:
   1. Natural objects
   2. Artificial objects
   3. Distances of linear measurement
   4. Bearings of direction
   5. Acreage

2. **True or False: The first owner, Senior, gets full rights to what was conveyed to him or her, as stated in the description of the land in the deed or patent document.**

   Correct Answer: True

3. **True or False: The metes-and-bounds survey generally includes the use of physical monuments. The location and the delimiters of land may be defined by describing its boundaries by; naming natural or artificial monuments, stating the lengths and directions, and/or giving the boundaries of abutting lands or marine areas.**

   Correct Answer: True

4. **When dealing with issues regarding water boundaries, which resources are at your disposal? (Select all that apply.)**

   A. Your local surveyor
   B. Marine Managed Areas: Best Practices for Boundary Making
   C. Statute of Frauds
   D. Manual of Surveying Instructions
   E. Tobin’s Guide to Water Elements by Peter Ray Egon


5. **True or False: Under English Common Law, the Statute of Frauds relates to land ownership with the basic principle that a valid conveyance of land title must be in writing.**

   Correct Answer: True