

AGENDA
2nd Spring 2007 ORMAP Tech Group Meeting
March 22, 2007
Dept. of Revenue Salem Field Office
10 am – 3 pm

- 1. Introductions and Objectives**
- 2. Approval of Minutes from March 1, 2007 Tech Group Meeting**
- 3. Minimum Metadata for ORMAP Funded Control Points**
- 4. Advisory Committee Meeting – May 3, 2007**
 - A. Recommendations
 - B. Policy Questions
- 5. DOR Director's Review/Award of ORMAP Grants – April 5, 2007**
- 6. Future Agenda Items**
- 7. Cadastral FIT Update – Cress Bates**
- 8. Fall Meeting Sites**
- 9. Adjourn**

MINUTES
2nd Spring 2007 ORMAP Tech Group Meeting

March 22, 2007
10:00 am – 11:50 am
Oregon Dept of Revenue / South Salem Field Office

Present: Dean Anderson, Polk County; Steve Barrett, Linn County GIS; Cress Bates, Lane County Public Works; Hall Guttormsen, IDS; Brian Hansberry, Yamhill County; Sally Hood, DOR; Brett Juul, DOR; Roger Livingston, Washington County; Phil McClellan, DOR; John Nemecek, City of Salem; JeriSue Ponder, Clatsop County; John Prychun, DOR; Rod Therriault, DOR

Facilitator: Phil McClellan

Scribe: Sally Hood

1. Introductions

Phil opened the meeting with introductions.

2. Approval of Minutes from March 1, 2007 Tech Group Meeting

The March 1, 2007 minutes had no additions or corrections.

3. Minimum Metadata for ORMAP Funded Control Points

This following information listed on a handout was discussed:

Metadata Requirements for Control Points Funded by ORMAP

In reviewing ORMAP product deliverables, ORMAP staff has experienced difficulty finding basic information about control points being gathered in support of ORMAP goals. This issue was raised at the spring 2007 ORMAP Technical Committee meeting for discussion. Because of this discussion, it was suggested to ensure consistency of the control point data (and metadata) gathered in support of ORMAP projects, a set of minimum requirements for control documentation is needed. This document seeks to outline the minimum required components of control point metadata and provide the format for capturing the metadata.

By requiring that surveyors provide this information as part of the deliverable of any ORMAP-related contract, counties (and the ORMAP project as a whole) can be assured that what they are receiving is consistent with what is being delivered to other counties and that the final, statewide product was created consistently.

These requirements should be viewed as the minimum metadata to be delivered; a county may want to require more information for its own needs.

Minimum Fields for Control Point Metadata

CornerDesc -- Description of corner

CommonName - Short name for position

ControlType - Type of control point (from BLM)

GCDB – BLM number

AutoMethod - Calculated, COGO, GPS, Converted, Keypunched, Proportion, Survey, Unknown

Source - Name of document that contains the source information

SourceType - Restoration, Survey, Subdivision, Aerial Photo, Partition, Deed, Other

Easting - Coordinate

Northing - Coordinate

Projection - Projection of coordinate

Datum - Datum for coordinate system

Units - Measurement units for position

Error Ellipse – X and Y accuracy (Reliability)

Optional Global Positioning System (GPS) Control Metadata

The Control Team in the Department of Revenue's Cadastral Information Systems Unit has suggested that the following metadata for GPS control may also be useful. All

information would be supplied to the sponsoring agency as part of each contract that included control as a deliverable.

GPS Receiver Brand, Model, and Antenna Type: *The receiver antenna type (i.e. internal or external) should be documented, as well as antenna height.*

PDOP or EPE: *The Position Dilution of Precision (PDOP) and/or the manufacturers Estimated Position Error (EPE) values used should be logged if the receiver is configurable to do so. This data will allow the analysis of the horizontal accuracy based on specific PDOP or EPE settings.*

SNR: *The Signal-to-Noise Ratio (SNR) used should be documented if the SNR mask is configurable.*

Differential Global Positioning System (DGPS) Signals: *When using real-time DGPS, identify the base station used.
(All information contained herein complies with Federal Geographic Data Committee Standards)*

Discussion Points:

- The information requested from the surveyor needs to be standardized.
- The handout lists 13 fields to be included.
- A distinction needs to be made between Resource Grade and Survey Grade surveys.
- See ORS 209

Questions:

1. ***Do all the surveys need to be recorded, or is there a way to save money by not recording them?***

The consensus of the group was that the cost to record the surveys is not a significant factor when looking at the cost as a whole. Recording the points makes the data available to everyone. It leaves a historical record of metadata. Surveyors generally want to record their work.

2. ***Do future grants need to comply with “Minimum Fields for Control Point Metadata”?***

Yes. Metadata for control points would need to be submitted to ORMAP as part of the deliverables. “Control must be filed at the county office” might be future language in ORMAP grant criteria. ORS 209.250 was noted and it was agreed that all surveys must comply with that criteria.

The following is the Oregon Revised Statute:

209.250 Survey by registered land surveyor; requirements for map, narrative or report of survey; waiver of required filing; effect of noncompliance.

(1) A registered professional land surveyor making a survey of lands within this state wherein the surveyor establishes or reestablishes a boundary monument shall, within 45 days thereafter, submit for filing a permanent map of the survey to the county surveyor for review.

When filed, the map is a permanent public record in the office of the county surveyor. In establishing or reestablishing a public land survey corner, the surveyor shall comply with ORS 209.070 (4), 209.130 and 209.200. If the surveyor is unable to complete the survey and submit a permanent map within 45 days, the surveyor shall, within 45 days of establishing or reestablishing a boundary monument, provide written notice to the county surveyor containing the reasons for the delay, an estimate of the amount of time reasonably necessary to complete the survey but not exceeding 180 days, and a temporary map showing the position of monuments established or reestablished.

(2) The permanent map must have a written narrative that may be on the face of the map. If the narrative is a separate document, the map and narrative must be referenced to each other. The map and narrative must be made on a suitable drafting material in the size required by the county surveyor. The lettering on the map and narrative must be of sufficient size and clarity to be reproduced clearly. The narrative must explain the purpose of the survey and how the boundary lines or other lines were established or reestablished and must state which deed records, deed elements, survey records, found survey monuments, plat records, road records or other pertinent data were controlling when establishing or reestablishing the lines. If the narrative is a separate document, the narrative must also contain the following:

(a) Location of survey by one-fourth section, Township and Range.

(b) The date of survey.

(c) The surveyor's seal and original signature.

(d) The surveyor's business name and address.

(3) A permanent map must show the following:

(a) Location of survey by one-fourth section, Township and Range.

(b) The date of survey.

(c) Scale of drawing and North Arrow.

(d) The distance and course of all lines traced or established, giving the basis of bearing and the measured distance and course to a monumented section corner, one-quarter corner, one-sixteenth corner or Donation Land Claim corner in Township and Range, or to a monumented lot or parcel corner or boundary corner of a recorded subdivision, partition or condominium.

(e) Measured bearings, angles and distances that are used as a basis for establishing or reestablishing lines or monuments separately indicated from those of record together with the recording reference. Metric measurements may be used if a conversion to feet is provided.

(f) Monuments set and their relation to older monuments found. A detailed description of monuments found and set must be included and monuments set must be separately indicated from those found.

(g) The surveyor's seal and original signature.

(h) The surveyor's business name and address.

(4)(a) Within 30 days of receiving a permanent map under this section, the county surveyor shall review the map to determine if it complies with subsections (1), (2) and (3) of this section and applicable local ordinances. A map must be indexed by the county surveyor within 30 days following a determination that the map is in compliance with this section. A survey prepared by the county surveyor in an official or private capacity must comply with subsections (1), (2) and (3) of this section.

(b) A survey map found not to be in compliance with subsection (1), (2) or (3) of this section must be returned within 30 days of receipt for correction to the surveyor who prepared the map. The surveyor shall return the corrected survey map to the county surveyor within 30 days of receipt of the survey map from the county surveyor.

(c) A map that is not corrected within the specified time period must be forwarded to the State Board of Examiners for Engineering and Land Surveying for action, as provided in subsection (11) of this section.

(d) An action may not be maintained against the county surveyor for recording a survey map that does not comply with this section.

(e) An action may not be maintained against the county surveyor for refusal to file a survey map that does not comply with this section.

(5)(a) When a survey within this state is funded entirely or in part by public funds and the survey results in the establishment of horizontal or vertical monuments for geodetic control, the registered professional land surveyor performing the survey, within 45 days after completion of the survey, shall file a report of the survey with the county surveyors of those counties where the newly established monuments are located.

(b) Notwithstanding paragraph (a) of this subsection, the governing body of a county may, by resolution or order, waive the filing of the report of the survey.

(6) A report required by subsection (5)(a) of this section may include maps or diagrams. The maps or diagrams, if included, must be referenced to each other. The report must contain the following:

(a) The name and number of each newly established geodetic control monument.

(b) Location of newly established geodetic control monuments by Section, Township and Range.

(c) Location of the horizontal component of geodetic control monuments by the Oregon Coordinate System as described in ORS 93.320 and 93.330, including the scale factor, combined scale factor, convergence and geographic or geodetic coordinates, indicating datum used.

(d) Location of the vertical component of geodetic control monuments by orthometric height, ellipsoidal height and geoidal separation, indicating datum used.

(e) The date of survey.

(f) The business name and address of the surveyor.

(g) A description of all monuments set or found, including narrative or graphic information sufficient to locate the monuments.

(h) A statement explaining the purpose of the survey, the equipment and procedures used, including the geoid model and reference ellipsoid used, and the names or numbers of the found record control monuments used and their source.

(i) The scale of drawing and North Arrow if a map or diagram is included.

(j) The seal and original signature of the surveyor.

(k) For geodetic control, a statement regarding the network accuracy and local accuracy of the survey, categorized by horizontal position, ellipsoidal height and orthometric height, relative to the National Spatial Reference System. The statement shall include the accuracy classification at the 95 percent confidence level for both network and local classifications in accordance with Standards for Geodetic Control Networks, Part 2 of the federal Geospatial Positioning Accuracy Standards (FGDC 1998) for the newly established monuments.

(7) The county surveyor shall file and index reports that comply with subsections (5) and (6) of this section within 30 days of determining compliance.

(8) A monument set by a registered professional land surveyor to mark or reference a point on a property or land line or to mark or reference a geodetic control survey point must be durably and visibly marked or tagged with the registered business name or the letters "L.S." followed by the registration number of the surveyor in charge or, if the monument is set by a public officer, the monument must be marked with the official title of the office.

(9) If, in the performance of a survey, a registered professional land surveyor finds or makes changes in a public land survey corner or its accessories as described in an existing corner record or survey map in the office of the county surveyor, the surveyor shall complete and submit to the county surveyor a record of the changes found or made to a corner or accessories to the corner. The record must be submitted within 45 days of the corner visits, and must include the surveyor's seal and original signature, business name and address, and be on stable base reproducible material in the form required by the county surveyor.

(10) The signature and stamp of a registered professional land surveyor on a permanent survey map or plat constitutes certification that the map or plat complies with the applicable provisions of this chapter.

(11) A registered professional land surveyor failing to comply with the provisions of subsections (1) to (9) of this section, ORS 92.050 to 92.080 or a county ordinance establishing standards for surveys or plats is subject to disciplinary action by the State Board of Examiners for Engineering and Land Surveying.

(12) A federal or state agency, board or commission, special district or municipal corporation making a survey of lands within this state shall comply with this section.

3. Does the survey have to be recorded before it can be used for mapping?

No.

4. When is an adjustment justified when new information is found? (i.e. air photo vs. map)

The concern is the GIS community would need to adjust multiple layers and it would be a burden to correct their records every time new information is put on a map. Jeri Sue Ponder of Clatsop County prefers to correct the GIS information as each adjustment is made; good communication between the cartographers and her is critical to getting the adjustments done timely. Steve Gano of Marion County has a program called "Shape Shifter" that will automatically move the data.

5. Why don't we make Lat & Long coordinates minimum fields?

If we are requiring Easting and Northing coordinates for the metadata, we should add latitude and longitude. The lat and long should be the primary data, and the Easting and Northing should be secondary data. We should also request vertical datum.

6. What is the surveyor's finished product: a piece of paper or a shapefile?

The deliverable should be defined by the contracting county. This could be a shapefile, spreadsheet, database, or other format depending on the needs of the county. ORMAP would accept the deliverable in the form used by the county.

7. How should the reliability field be attributed?

The narrative, the types of equipment, how the survey was processed, and the dates will all contribute to the reliability of the survey.

Summary of the Recommendations:

1. Keep the minimum Requirements document.
2. Add anything ORS 209 requires to be in compliance.
3. Add latitude and longitude fields.
4. Add vertical datum field.
5. Add a requirement to file the survey.

4. Advisory Committee Meeting

The next Advisory Committee Meeting will be May 3, 2007. There were no concerns expressed to be taken to the Advisory Committee.

5. DOR Director's Review/Award of ORMAP Grants – April 5, 2007

The award letter should be going out April 9th.

6. Future Agenda Items

There were no suggestions for future agenda items.

7. Cadastral FIT Update – Cress Bates

The first meeting of the Framework Implementation Team will be April 10, 2007, at the AOC Building in Salem. This will precede the PLSS meeting at the same location. Agenda items include defining a Mission statement, Goals, and a work plan. In looking at who we are and what we will be working on, the focus will be on:

1. County boundary lines
2. Vertical integration of taxlot data
3. Control data maintenance
4. When is it necessary to adjust all data
5. Provide a control data model set
6. Tax lot data distribution issues

The groups that will be working under the umbrella of the FIT include:

ORMAP Workgroup – Overseeing the cadastral exchange and control of the metadata

PLSS Workgroup

Public Lands Workgroup

8. Fall Meeting Site

Phil requested offers for the fall meeting site. Eugene was available again. Phil will review the agenda and determine the most convenient location.

Meeting Adjourned at 11:50 am