



# California Regional Water Quality Control Board Central Valley Region

Karl E. Longley, ScD, P.E., Chair



Linda S. Adams  
Secretary for  
Environmental  
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24 September 2009

**CERTIFIED MAIL**  
**7009 0960 0000 4241 8866**

Mr. Ken Johnson  
Technical Services  
Synagro West, Inc.  
3845 Bithell Lane  
Suisun City, CA 94585

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Mr. Duncan McCormack  
440 Drouin Dr.  
Rio Vista, CA 94571

***REVISED NOTICE OF APPLICABILITY, WATER QUALITY ORDER NO. 2004-0012-DWQ  
GENERAL WASTE DISCHARGE REQUIREMENTS FOR THE DISCHARGE OF BIOSOLIDS  
TO LAND, MCCORMACK FARMS (SO-21), SOLANO COUNTY***

Central Valley Regional Water Quality Control Board (Central Valley Water Board) staff received a Notice of Intent (NOI) on 5 December 2008 from Synagro West, Inc. and Mr. Duncan McCormack (here after jointly referred to as Discharger) to update their coverage under State Water Resources Control Board (State Water Board) Water Quality Order No. 2004-0012-DWQ, the *General Waste Discharge Requirements for the Discharge of Biosolids to Land for Use as a Soil Amendment in Agricultural, Silvicultural, Horticultural, and Land Reclamation Activities* (General Order). The Discharger submitted new information to remove a restriction in the Notice of Applicability (NOA) issued on 19 April 2005 which specified that biosolids could be applied "only every third year." Based on the information in the NOI and subsequent documentation, Central Valley Water Board staff concurs that the project meets the required conditions for approval under the General Order, without limiting application to every third year. This letter serves as formal notice that the General Order is applicable to the sites and discharge described below. This facility has been assigned a Central Valley Water Board order-specific tracking number of No. 2004-0012-DWQ-0004.

A copy of the General Order is enclosed for the Discharger; it may also be viewed at the following web address:

[http://www.waterboards.ca.gov/board\\_decisions/adopted\\_orders/water\\_quality/2004/wqo/wqo2004-0012.pdf](http://www.waterboards.ca.gov/board_decisions/adopted_orders/water_quality/2004/wqo/wqo2004-0012.pdf).

You are urged to familiarize yourself with the contents of the entire General Order. The discharge must be managed in accordance with the requirements contained in the General Order, the information submitted in the NOI, and the requirements contained in this NOA.

**California Environmental Protection Agency**



## PROJECT DESCRIPTION

The Discharger's land application area is located in the southeastern portion of Solano County about 2 miles northwest of Rio Vista's city boundary as shown in Attachment A, which is eleven pages and is attached hereto and made part of this NOA. Approximately 1120 acres of agricultural land, comprised of six field sites, are owned by Mr. Duncan McCormack and available for biosolids application. However, due to set back buffer zone boundaries and groundwater elevation considerations this NOA allows biosolid application to 906 acres, as shown in the table below and depicted in Attachment A.

Site ID	Section	Township	Range	Gross Acreage	Applied Acreage
SO 21-7	4	4N	2E	160	158
SO 21-8	4	4N	2E	160	108
SO 21-9	4	4N	2E	160	117
SO 21-12	8	4N	2E	160	136
SO 21-17	20	4N	2E	160	125
SO 21-18	20 and 29	4N	2E	320	262
<b>Total</b>				<b>1120</b>	<b>906</b>

The terrain is flat to gently sloping, with slopes of up to four percent on sites SO 21-17 and SO 21 -18. The sites grow pasture grasses and are used for cattle grazing. The pastures are not irrigated and receive approximately 15 inches of precipitation per year as the sole water source. Site drainage is to an intermittent stream that traverses the site north to south. Site soils are typically well-drained clays of the Altamont series, underlain by siltstone at a depth 25 to 40 inches and exhibit cation exchange capacities ranging from 15 to 30 meq/100g. Soil pH values are typically less than 6.3, indicating a moderate potential for heavy metal mobilization.

Biosolids will be applied only between April 15 and October 15 and will be incorporated into the soil on the same day. Biosolids will be applied in accordance with the Solano County ordinance (e.g. no application during precipitation events). Setbacks that comply with the General Order and Solano County Ordinance will be marked prior to each application. The overall facility perimeter and on-site drainage/creeks will have a boundary of at least 33 feet of unmowed grass or similar vegetation. Therefore, storm water retention is not required.

## GROUNDWATER CONDITIONS

Three groundwater monitoring wells (MW-1, MW-2, and MW-3) were installed in field site SO 21-7 in April 2002. The wells were sampled once in April 2002 and began quarterly sampling in April 2005.

Groundwater is encountered at about 10 feet below ground surface. Comparison of water quality data for the upgradient monitoring well MW-2 to downgradient wells MW-1 and MW-3 indicates that groundwater has not been degraded as a result of biosolids application. The groundwater monitoring and resulting data is considered representative of the contiguous land application sites SO 21-7, SO 21-8, and SO 21-9. Therefore, this NOA applies to these land

application sites and the noncontiguous sites SO 21-12, SO 21-17, and SO 21-18, which are at a higher elevation and estimated to have a greater depth to groundwater.

### **MONITORING AND REPORTING**

The Discharger must comply with Monitoring and Reporting Program (MRP) No. R5-2009-0846, which is attached hereto and made part of this NOA. This site specific MRP replaces the requirements of the MRP contained in the General Order. The MRP is effective immediately, and requires the submittal of monthly monitoring reports. Until your coverage under the General Order is formally terminated, monthly monitoring reports need to be submitted even if there is no biosolid land application during the reporting period. Please reference your unique Order No. 2004-0012-DWQ-0004 and your MRP No. R5-2009-0846, when submitting your monitoring reports.

### **GENERAL INFORMATION AND REQUIREMENTS**

The Provision D.1.a of the General Order requires that after the NOA is issued no discharge shall occur until 15 days after submission of the Pre-Application Report. The submittal of a Pre-Application Report prior to discharging under this NOA is not required because:

1. The Discharger submitted a Pre-Application Report with their previous NOI, and
2. The Discharger has been following Monitoring and Reporting Program No. R5-2005-0814.

The Discharger is required to implement its *Biosolids Spill Response Plan and Monitoring and Reporting Plan*. The Discharger may only apply biosolids in areas as indicated in Attachment A. Discharge of material other than what is described in the application is prohibited.

This letter serves as formal notice that Water Quality Order No. 2004-0012-DWQ is applicable, as described above. If the discharge violates the terms or conditions of the General Order, the Central Valley Water Board may take enforcement action, including assessment of administrative civil liability.

Prior to implementing any discharge changes, a new NOI must be submitted for continued coverage under the General Order or a Report of Waste Discharge must be submitted for coverage under individual Waste Discharge Requirements.

The required annual fee specified in the annual billing from the State Water Board shall be paid until this NOA is officially terminated. Within **60 days** of the time the discharge regulated by this General Order ceases, the Discharger must notify this office in writing using the Notice of Termination form that accompanies the General Order No. 2004-0012-DWQ.

All monitoring reports submittals, discharge notifications, and questions regarding understanding these requirements as well as general compliance and enforcement shall be directed to Ms. Mary Boyd (916) 464-4676 or [mboyd@waterboards.ca.gov](mailto:mboyd@waterboards.ca.gov). Questions regarding submitting an updated NOI for General Order coverage, or making changes to your permitted activities may be directed to Mr. Robin Merod at (916) 464-4697 or [rmerod@waterboards.ca.gov](mailto:rmerod@waterboards.ca.gov).

Pamela C. Creedon  
Executive Officer

Attachments: Attachment A, Regional, Site and Field Maps  
Attachment B, Monitoring and Reporting Program No. R5-2009-0846

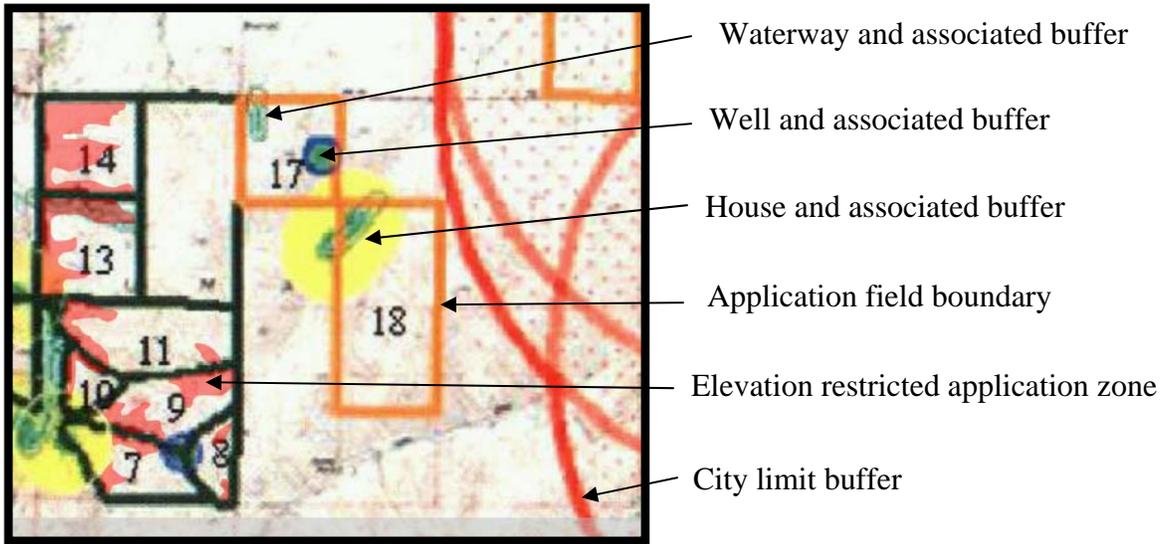
Enclosures: State Water Board Water Quality Order No. 2004-0012-DWQ

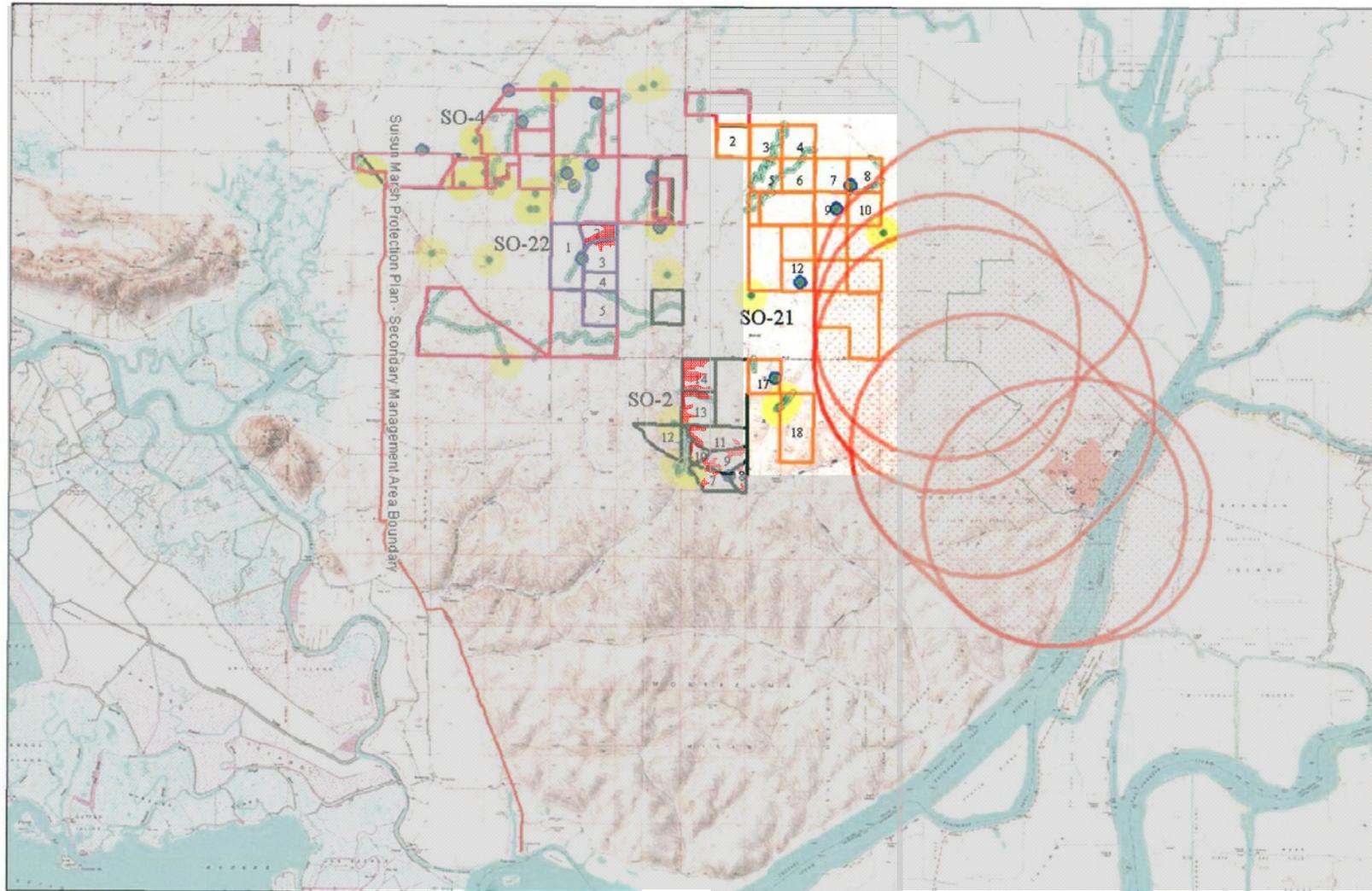
cc w/out enc.: Mr. Gordon Innes, Division of Water Quality, State Water Board, Sacramento  
Mr. Jeffrey Bell, Solano County Environmental Health Department, Fairfield  
Mr. Ken Johnson, Synagro Southwest, Tolleson, AZ

Attachment A

Index and Legend.....Page 1  
Regional Map.....Page 2  
SO21 Site Map Page .....Page 3  
SO21-6 Field Map.....Page 4  
SO21-7 Field Map.....Page 5  
SO21-8 Field Map.....Page 6  
SO21-9 Field Map.....Page 7  
SO21-10 Field Map.....Page 8  
SO21-12 Field Map.....Page 9  
SO21-17 Field Map.....Page 10  
SO21-18 Field Map.....Page 11

Legend for required set backs:





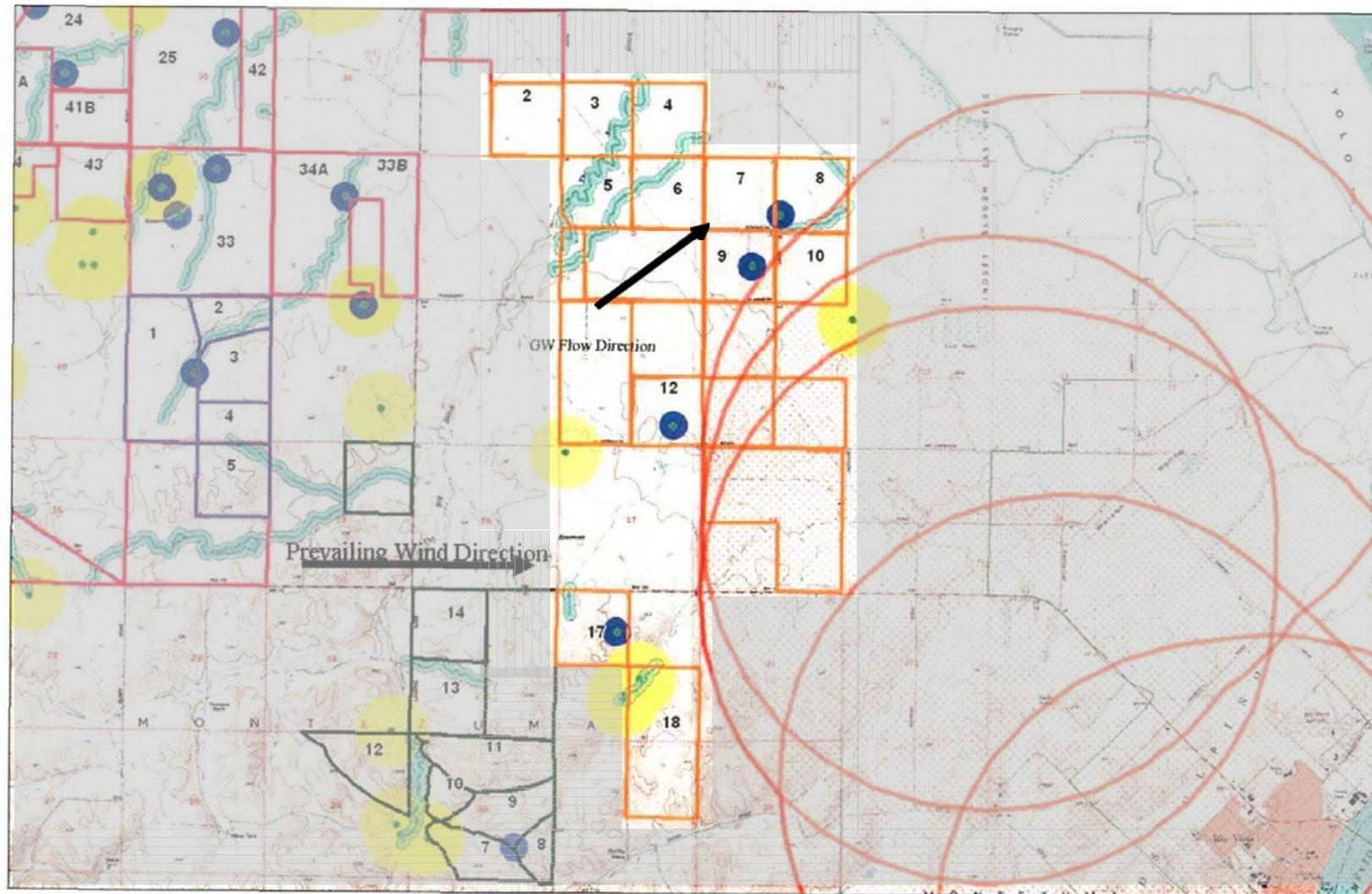
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MN (14.4° E)

Regional Map

0 1 2 3 4 5 mi  
Data Zoom 10-4

Drawing Reference:  
DeLorme XMap 5.0 GIS Editor

**MAP OF BIOSOLID APPLICATION AND BUFFERS  
SYNAGRO MCCORMACK FARMS (SO-21) SITE  
SOLANO COUNTY**



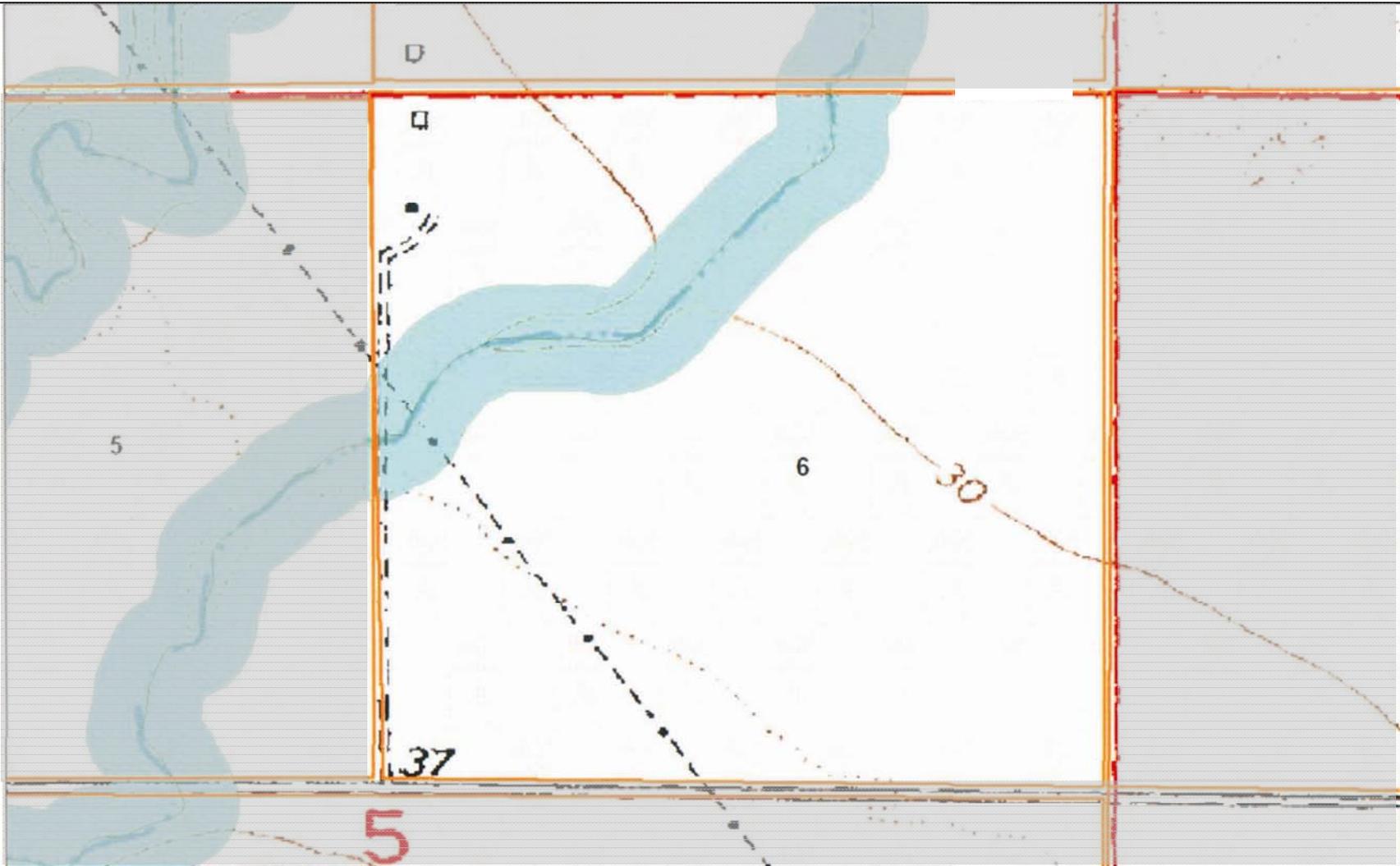
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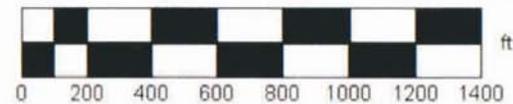
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**Drawing Reference:**  
DeLorme XMap 5.0 GIS Editor

**MAP OF BIOSOLID APPLICATION AND BUFFERS  
SYNAGRO MCCORMACK FARMS (SO-21) SITE  
SOLANO COUNTY**



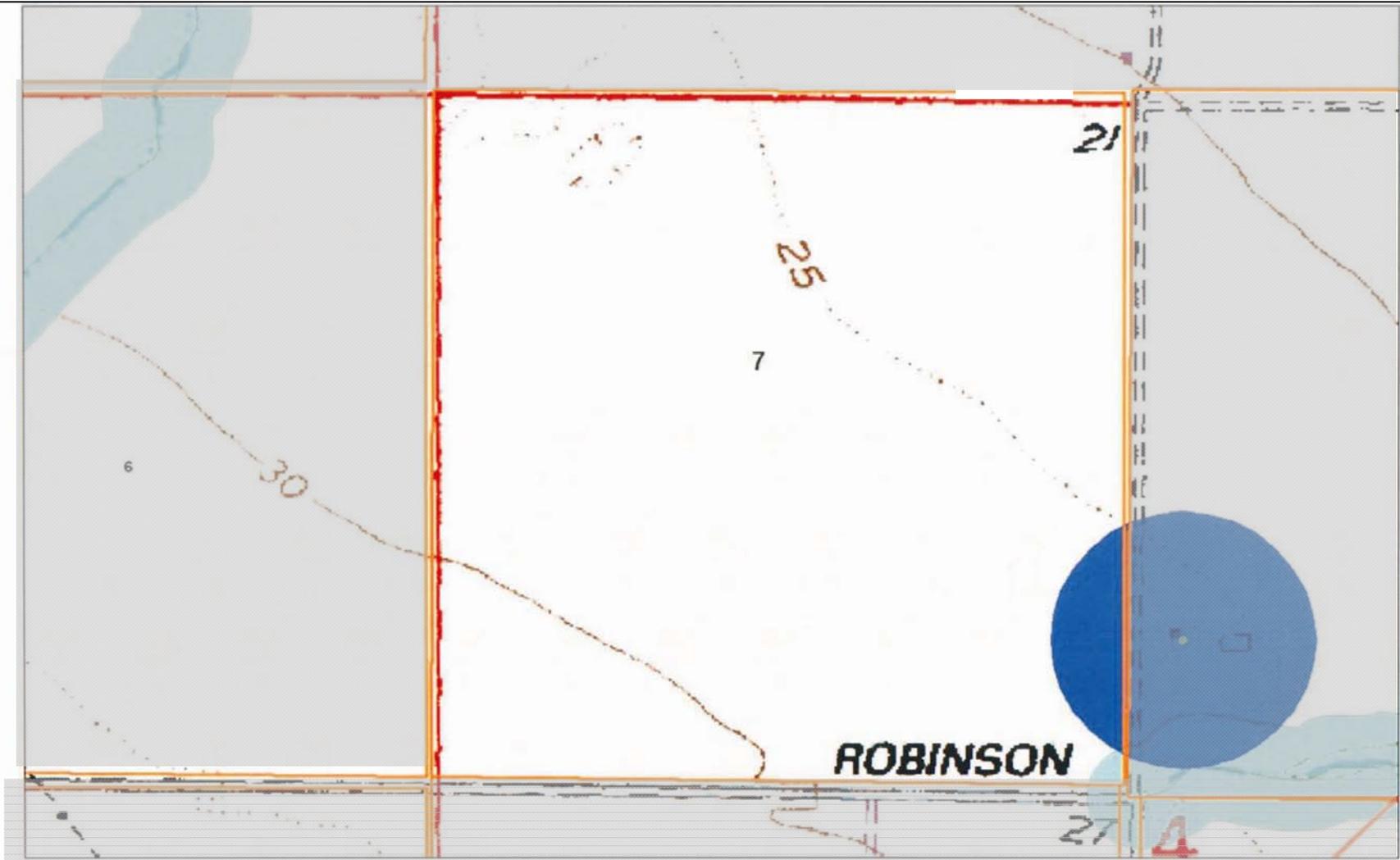
SO21-6



Data Zoom 14-7

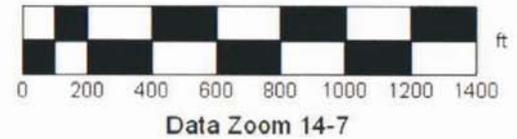
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**MAP OF BIOSOLID APPLICATION AND BUFFERS  
SYNAGRO McCORMACK FARMS (SO-21) SITE  
SOLANO COUNTY**



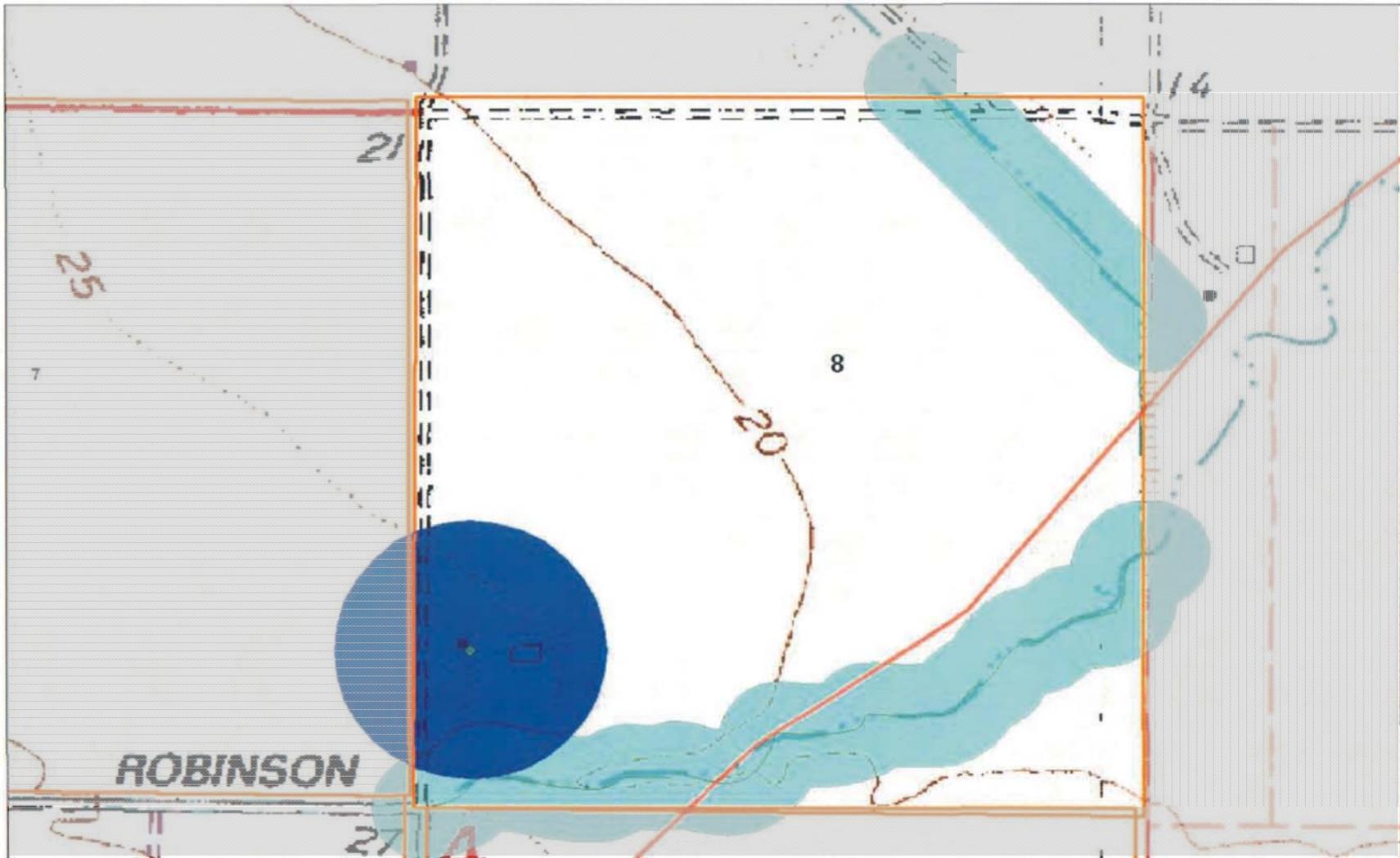
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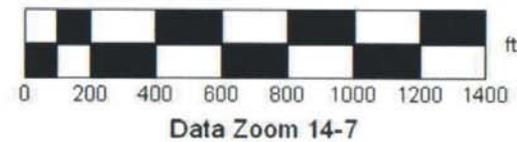
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MAP OF BIOSOLID APPLICATION AND BUFFERS  
SYNAGRO McCORMACK FARMS (SO-21) SITE  
SOLANO COUNTY



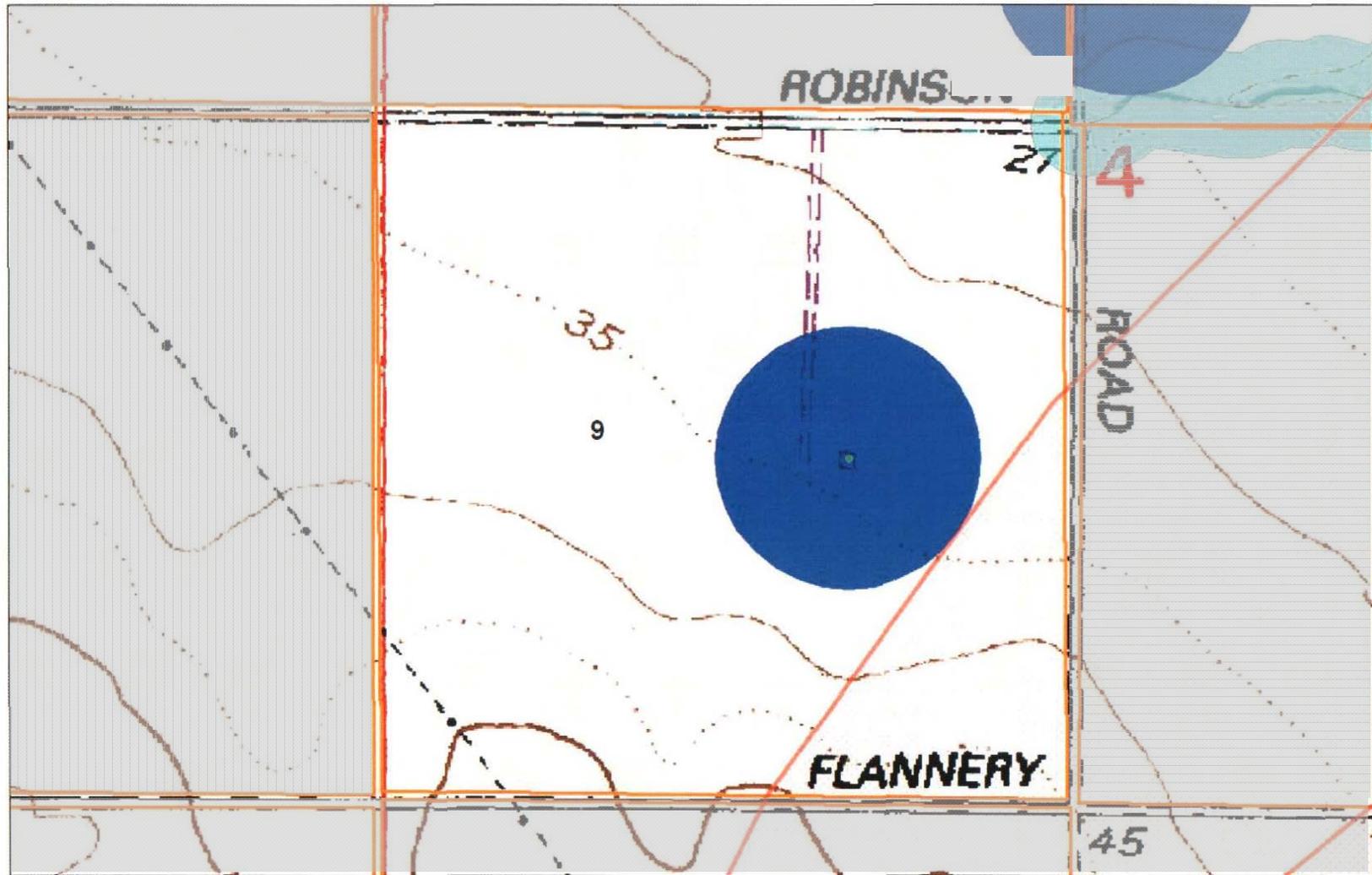
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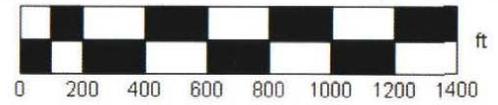
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MAP OF BIOSOLID APPLICATION AND BUFFERS  
SYNAGRO MCCORMACK FARMS (SO-21) SITE  
SOLANO COUNTY



MN (14.5° E)

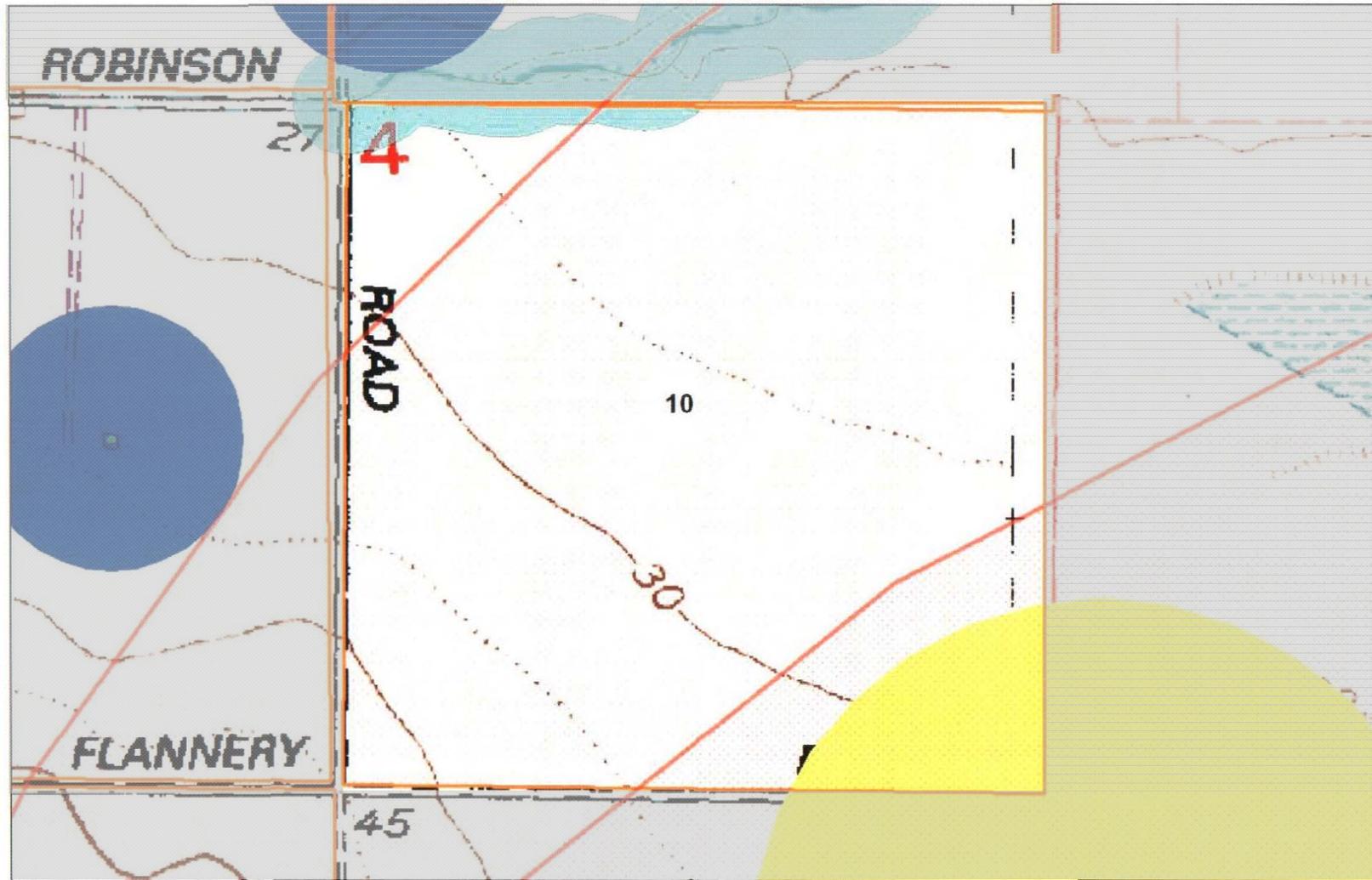
SO21-9



Data Zoom 14-7

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MAP OF BIOSOLID APPLICATION AND BUFFERS  
SYNAGRO McCORMACK FARMS (SO-21) SITE  
SOLANO COUNTY



MN (14.5° E)

SO21-10

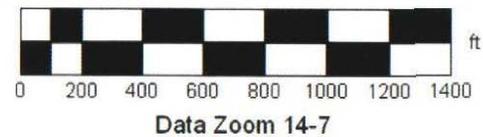
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SOLANO COUNTY

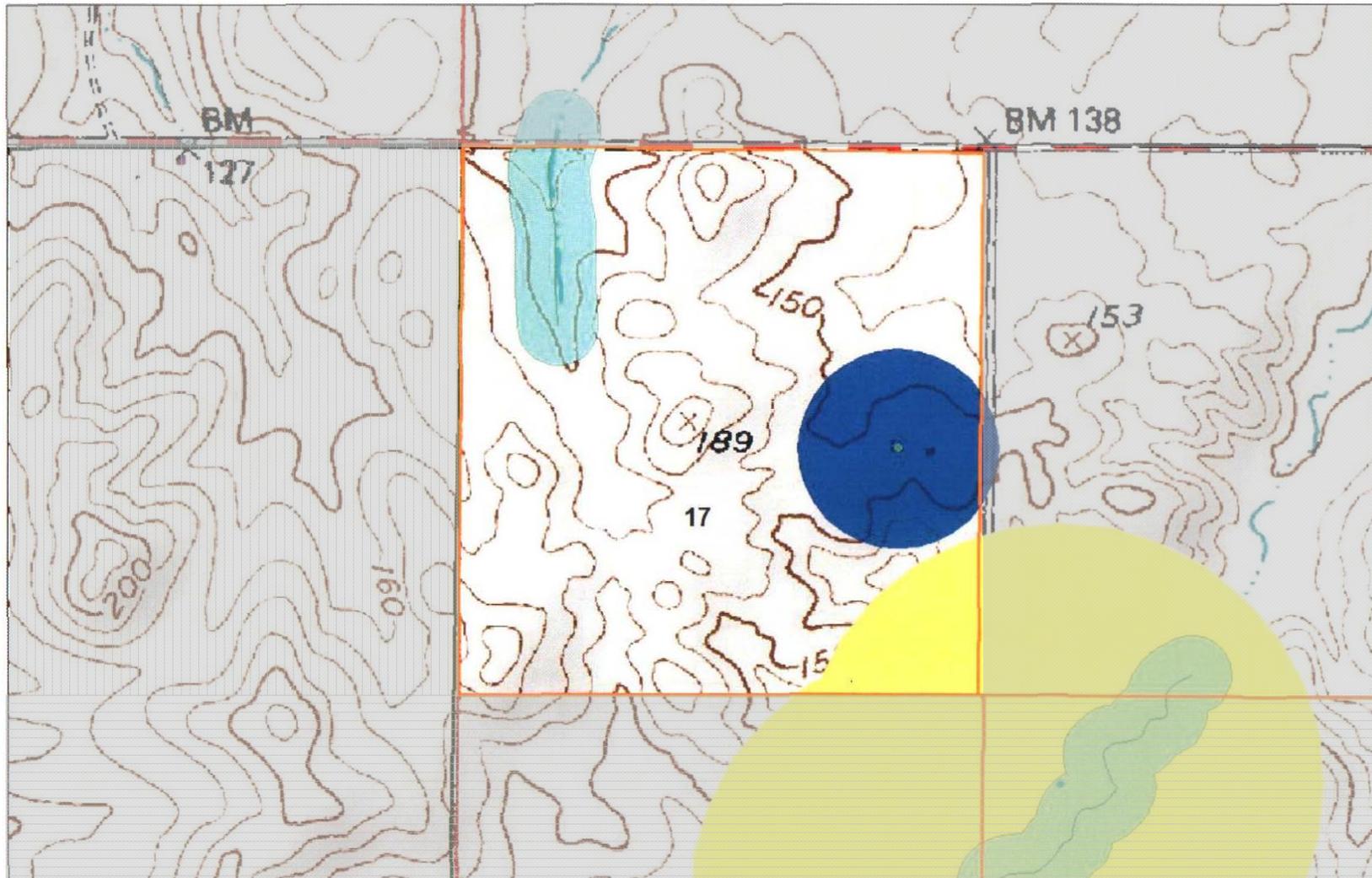


SO21-12



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**MAP OF BIOSOLID APPLICATION AND BUFFERS  
SYNAGRO MCCORMACK FARMS (SO-21) SITE  
SOLANO COUNTY**



MN (14.5° E)

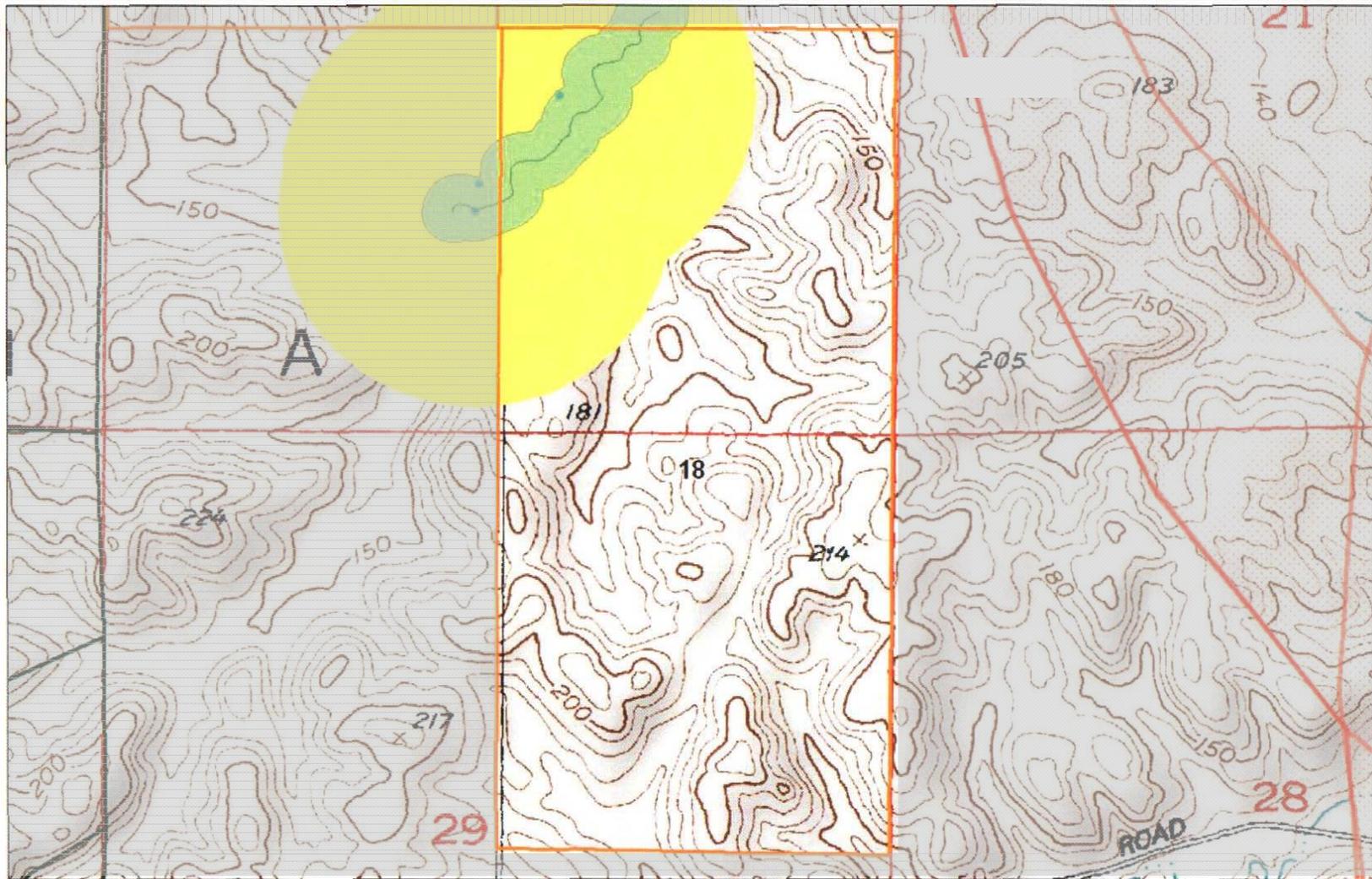
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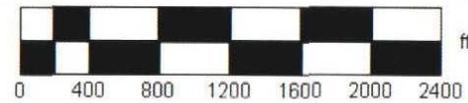
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MAP OF BIOSOLID APPLICATION AND BUFFERS  
SYNAGRO McCORMACK FARMS (SO-21) SITE  
SOLANO COUNTY



MN (14.4° E)

SO21-18



Data Zoom 14-0

**Drawing Reference:**  
DeLorme XMap 5.0 GIS Editor

**MAP OF BIOSOLID APPLICATION AND BUFFERS  
SYNAGRO MCCORMACK FARMS (SO-21) SITE  
SOLANO COUNTY**