


# Terradex LandWatch™

## Available Land Activity and Use Sources


Terradex LandWatch™ service can monitor and alert from various land activity and use categories. Every site has different concerns about land activities and use, and this chart allows shaping LandWatch to site stewardship monitoring requirements.


Terradex supplies data at the data source level as indicated by the **Source Name**. For each source, a **Description** identifies the breadth of information provided, the **Relevance** offers the relevance toward institutional or engineering control monitoring, the **Data Quality and Timeliness** conditions the data, and finally the **Coverage** allows considering where the data would be available. *All data sources are best validated with Terradex prior to assuming their availability. Fees will be identified based upon select of data sources, quantity of sites monitoring, and quantity of jurisdictions monitored.*

 <b>Real Estate Activity Category</b>				
Source Name	Description	Relevance	Data Quality and Timeliness	Coverage
<b>Residential/ Commercial Listings</b>	Comprehensive real estate sales listing, compiled daily from various commercial sources. Information includes realtor, description of property, and location.	Identifies potential land sales at identified environmental or IC sites.	Ordinarily compiled continuously (typically daily) for new listings, and the listings are typically identified specifically by APN and/or address (Terradex converts to lat/long). Non-advertised (e.g., sale by owner) land sales are not captured.	National
<b>Foreclosure</b>	Public pre-foreclosure and foreclosure notices collected on an approximate weekly basis from commercial and/or government sources. Information includes description of property and, foreclosure-related event.	Identifies potential or recent foreclosure sales (foreclosure sales can “wipe out” recorded deed restrictions) at identified environmental or IC sites.	Ordinarily compiled weekly, and the property is specifically identified by APN and/or address (Terradex converts to lat/long). Government source information can lag due to internal processing procedures and thus in some cases notices might be discovered as much as 4-6 weeks after the event.	National
<b>Ownership</b>	Public property records and tax assess records identifying property owner and related information, typically compiled monthly, from government and/or commercial sources. Includes current landowner(s) name and parcel ID.	Identifies the current owner and tracks whether any recent change of ownership has occurred at identified environmental or IC sites.	Ordinarily compiled weekly, and the property is specifically identified by APN and/or address (Terradex converts to lat/long). Government source information can lag due to internal processing procedures and thus in some cases notices might be discovered as much as 4-6 weeks after the event.	National
<b>Tenancy/ Occupancy</b>	Public records of new utility (e.g., water, electricity) accounts and/or telephone listings, available from commercial and/or government sources for commercial and residential property.	Identifies new tenants and new occupants at identified environmental or IC sites.	Ordinarily compiled weekly, and the tenancy is identified at an address level. Accurate to new tenants requesting utility hook-up or new businesses responding to phone confirmation.	National

# Terradex LandWatch™ - Available Land Activity and Use Sources


- Continued -


 <b>Excavation Category</b>				
Source Name	Description	Relevance	Data Quality and Timeliness	Coverage
<b>Excavation Notices Through Call-before-you Dig</b>	Continuous stream of records of planned excavation, accessible from state One Call centers. Includes the contractor, owner, description of work, date work is scheduled to begin, and location of work.	Identifies potential excavation activities that could compromise or breach environmental remedies or ICs.	Ordinarily compiled twice per day. Location information provided by address or intersection (Terradex converts to lat/long). Shallow excavations may provide “false positives” when deeper IC not affected. Undocumented excavations are not captured.	Varies by state. Should be validated before selecting.
<b>Dredging</b>	Public records of federal and/or state government permits for dredge or fill activities in submerged lands.	Identifies proposed dredging activities at environmental or IC sites that contain submerged lands or are situated nearby submerged lands.	Ordinarily compiled weekly. Location information provided as navigable feature (Terradex converts to lat/long).	Generally available nationwide near major water waterways and oceans.
<b>Grading Permits</b>	Public records of city or county government permits for grading and excavation.	Identifies excavation or grading permits that require a local permit, at or near environmental or IC sites.	Ordinarily compiled monthly. Government source information can lag due to internal government processing procedures. Location ordinarily identified by addresses or APN (Terradex converts to lat/long).	National in most local jurisdictions. Should be validated before selecting.


 <b>Building and Land Development Permits Category</b>				
Source Name	Description	Relevance	Data Quality and Timeliness	Coverage
<b>Building Permits</b>	Public records of city or county building permit issuances, available from commercial and/or government sources. Always includes location and type of work, and usually will include contact information as well	Identifies recently-issued permits for a variety of activities depending on the locality, including activities such as renovations, demolitions, alterations, underground parking, and many other construction events.	Ordinarily compiled monthly. Government source information can lag due to internal government processing procedures. Location ordinarily identified by addresses or APN (Terradex converts to lat/long).	National in most local jurisdictions. Should be validated before selecting.
<b>Development Permits</b>	Public records related to development permitting and entitlement available from commercial and/or governments sources, varying by locale, including permits such as environmental review permits, and development approvals.	Identifies anticipated land development projects at or near environmental or IC sites.	Ordinarily compiled monthly. Government source information can lag due to internal government processing procedures. Location ordinarily identified by addresses or APN (Terradex converts to lat/long).	National in most local jurisdictions. Should be validated before selecting.
<b>Zoning Action</b>	Public records related to zoning actions, available from government sources, such as zoning amendments, variances, and conditional use permits.	Identifies anticipated land uses in contravention of current zoning ordinances.	Ordinarily compiled monthly. Government source information can lag due to internal government processing procedures. Location ordinarily identified by addresses or APN (Terradex converts to lat/long).	National in most local jurisdictions. Should be validated before selecting.

# Terradex LandWatch™ - Available Land Activity and Use Sources

- Continued -


 <b>Water Use Category</b>				
Source Name	Description	Relevance	Data Quality and Timeliness	Coverage
<b>Groundwater Usage</b>	Public records of water well installation notifications, construction permits and/or completion reports available from various government sources.	Identifies anticipated or recently installed groundwater wells at identified environmental or IC sites.	Ordinarily compiled monthly. Government source information can lag due to internal government processing procedures. Location ordinarily identified by addresses or APN (Terradex converts to lat/long).	Homeland security concerns can impact availability at the state-level.
<b>Surface Water Usage</b>	Public records of surface water withdrawal permits, available from various government sources.	Identifies anticipated surface water use, at or near identified environmental or IC sites.	Ordinarily compiled monthly. Government source information can lag due to internal government processing procedures. Location ordinarily identified by addresses or APN (Terradex converts to lat/long).	National


 <b>New Construction Category</b>				
Source Name	Description	Relevance	Data Quality and Timeliness	Coverage
<b>Construction Bids</b>	Public records of bid-requests for construction projects, available from various commercial providers and/or government sources. Includes type of construction and location.	Identifies major future construction projects (such as public works projects) far in advance.	Ordinarily compiled weekly. Location ordinarily identified by addresses or APN (Terradex converts to lat/long).	National


 <b>Sensitive Land Use Category</b>				
Source Name	Description	Relevance	Data Quality and Timeliness	Coverage
<b>Childcare School Hospital Senior Care</b>	Public records of new occupancy licenses or other type of government approvals, available from commercial and/or government sources, for sensitive uses including childcare facilities, schools, hospitals or senior care are provided.	Identifies proposed sensitive uses at or near environmental or IC sites (sensitive uses may comply with zoning but nonetheless jeopardize an IC).	Ordinarily compiled weekly. Location ordinarily identified by addresses or APN or more even more specifically (Terradex converts to lat/long).	National

# Terradex LandWatch™ - Available Land Activity and Use Sources

- Continued -

 <b>Environmental Release Category</b>				
Source Name	Description	Relevance	Data Quality and Timeliness	Coverage
<b>Remediation Cleanup Sites</b>	Public records of sites identified as requiring cleanup or remediation by state or federal agencies, available from government sources.	The existence of neighboring cleanup sites may impact the management, stewardship, or ICs at identified sites.	Ordinarily compiled weekly. Location ordinarily identified by addresses or APN or more even more specifically (Terradex converts to lat/long). Remediation sites are only listed after adoption as a case.	National coverage
<b>New Releases</b>	Public records of new releases or spills to land or water that were reportable under federal or state statute.	Relative to Remediation Cleanup Sites, listings of new spills more rapidly reflects a new release.	Ordinarily compiled weekly. Location accuracy varies from intersection to address (Terradex converts to lat/long).	National

 <b>Remote Monitoring Category</b>				
Source Name	Description	Relevance	Data Quality and Timeliness	Coverage
<b>Vapor Intrusion Remediation Water Level Video Monitoring Weather</b>	Customized remote monitoring solutions are integrated into LandWatch presuming the instrument is Internet accessible and responds to customary data query protocols.	Numerous cleanup sites have onsite instrumentation or monitoring. This may include monitoring vapor intrusion blowers, remediation system status, water levels, weather instrumentation or motion detectors on web cams.	Ordinarily queries to data systems occur hourly.	National

 <b>Affirmative Obligation Compliance Tracking</b>				
Source Name	Description	Relevance	Data Quality and Timeliness	Coverage
<b>Inspections Reporting</b>	Customer-provided affirmative obligations, ordinarily based on regulatory or contract requirements for inspection, monitoring, and/or reporting of environmental remedy maintenance or ICs.	Terradex monitors required forthcoming events and records prior monitoring events to help assure compliance. Adverse consequences for failing to perform required affirmative obligations could impact customer or remedy.	Terradex would provide advance notices on an affirmative obligation, and would log the completion of the obligation. Terradex normally would not satisfy the obligation, though upon request can arrange for said obligations to be completed and logged.	National