



**Tobin Map Data Products  
1:100k Culture and Product  
Specifications**

**Tobin Map Data Products:  
1:100k Culture Product And Attribute  
Specifications**



# Tobin Map Data Products 1:100k Culture and Product Specifications

## TABLE OF CONTENTS

MAP DATA PRODUCTS – 1:100K CULTURE .....	3
Introduction.....	3
Source Data.....	4
Data layers .....	4
Layer Description.....	4
Known Errors.....	4



## Tobin Map Data Products 1:100k Culture and Product Specifications

### MAP DATA PRODUCTS – 1:100K CULTURE

#### Introduction

The 2005 Tobin 1:100k Culture data set is a replacement for all 100k Culture data set(s) provided by Tobin/P2 Energy Solutions prior to 2005. The *new* 100k Culture was derived from the USGS Digital Line Graphic (DLG) data, with annotation coming from the Geographic Names Information System (GNIS). This product is intended to function as a GIS reference tool and is Hydrography and Transportation focused.

#### The new 1:100k Culture dataset provides:

- An expansion (both in attributes and in spatial data) over the previous data set.
- An enhancement in attribute information from the previous data set.
- Corrections to some known issues (detailed below) contained in the previous data set.

#### Specific changes represented in the 1:100k Culture dataset:

- The “LAYER\_NAME” attribute is replaced by the “FEATURE” attribute. The “FEATURE” attribute is populated where USGS supplied feature name attributes. Otherwise, the class/type description is populated. Please reference class/type codes and descriptions at the bottom of this document.
- The population of the “FEATURE” attribute is intended to complement the class and type values, thus reducing the reliance on annotation for feature description.
- Added attributes are SNAME and CNAME.
- The annotation layer contains more applicable data to the dataset, which results in less annotation in the newer dataset.

#### 1:100k Culture Maintenance:

- Updated on a regular basis as updates are available.
- Delivered on a county by county basis.
- Will reflect USGS DLG updates.
- Will reflect additional updates, edits, and maintenance as may be identified by P2 Energy Solutions.

#### Identified issues in the old 1:100k Culture shelf product:

- Indiana has 1/3 of the counties missing.
- South Carolina has half of a one-degree window missing.
- Georgia has a culture feature with an incorrect Latitude/Longitude.
- Congested areas (major cities) have many transportation features missing.
- Features have inconsistent class/types, especially along shoreline and coastline.

Many of these issues are now corrected with just a few known errors (listed below). The issue where the USGS was not consistent in their digitizing efforts is still present in this dataset. It is expected that users will notice this issue, but hopefully to a lesser degree.



## **Tobin Map Data Products 1:100k Culture and Product Specifications**

### ***Source Data***

USGS – 1998 (Spatial Data)  
GNIS – 2004 (Annotation and Point)

### ***Data layers***

Hydrography  
    Point, Line, & Polygon  
Transportation  
    Roads and Trails  
        Line & Point  
    Railroad  
        Line & Point  
    Miscellaneous Transportation  
        Line & Point

### ***Layer Description***

Cult1 – Polygon Layer  
Cult2 – Line Layer  
Cult3 – Point Layer

### ***Known Errors***

Missing Quads  
    4 absent quads along WA – OR border  
    1 absent quad in MT  
    1 absent quad in NE

Spatial data is resident only inside county boundaries with excess data being omitted.



## Tobin Map Data Products 1:100k Culture and Product Specifications

Feature classes:

100k Culture is often segregated into point, line and polygon feature classes:

<b>Feature Class</b>	<b>Class Code</b>	<b>Type Code</b>	<b>Description</b>
Culture_point	3	30	Rock or group of rocks
	3	31	Rock or group of rocks, submerged
	6	10	River mile mark
	6	55	Falls
	6	60	Upper origin of stream
	6	61	Upper origin of stream at water body
	6	62	Stream entering water body
	6	63	Stream exiting water body
	6	64	Sink
	6	70	Spring or seep
	6	71	Spring or seep, hot or mineral
	6	80	Non-flowing well
	6	81	Non-flowing well, dry
	6	82	Non-flowing well, hot or mineral
	6	83	Non-flowing well, salt
	6	90	Flowing well
	6	91	Flowing well, intermittent
	6	92	Flowing well, hot or mineral
	7	15	Gate (flood, tidal, head, or check)
	7	30	Canal lock or sluice gate
	7	35	Levee
	7	40	Gauging station
	7	43	Pumping station
	7	46	Water intake
	7	65	Penstock
	7	66	Penstock, in tunnel
	7	70	Siphon
	7	71	Siphon, overpassing
	7	72	Siphon, underpassing
	7	75	Riser
	7	80	Fish ladder
	7	85	Windmill
	7	86	Windmill, dry
	7	87	Windmill, salt
	7	90	Cistern
	9	60	Geyser or vent
	12	80	Cloverleaf or interchange
	12	85	Traffic circle
	12	90	Crossing
	13	0	Gate
13	10	Cul-de-sac	
13	20	Dead end	
14	0	Bridge abutment	
14	50	Tunnel portal	
15	10	Toll gate or toll plaza	
15	20	Weigh station or agricultural	
18	60	Crossover	
19	10	Turntable	
19	20	Roundhouse	
19	30	Railroad station	
20	0	Bridge abutment	
20	10	Tunnel portal	
20	20	Drawbridge	
20	30	Railroad ferry crossing	
23	20	Tower on transmission line	



## Tobin Map Data Products 1:100k Culture and Product Specifications

23	40	End of transmission linear power station, substation or Hydroelectric plant
23	60	Power station
23	61	Nuclear power station
23	70	Hydroelectric Plant
23	80	Substation
24	20	End of pipeline at oil or gas
24	30	End of pipeline at refinery, depot, or tank farm
24	50	Pumping station or compressor station
24	60	Measuring station or valve station

<b>Feature Class</b>	<b>Class Code</b>	<b>Type Code</b>	<b>Description</b>
Culture_line	3	5	Danger curve
	3	8	Sounding datum
	3	11	Low-water line
	3	14	Beach
	3	25	Shoal
	3	35	Coral reef or rock reef
	3	36	Coral reef or rock reef, exposed at low water
	3	50	Channel or boat trail
	3	51	Channel or boat trail, navigable
	3	52	Channel or boat trail, submerged
	5	0	Shoreline
	5	1	Shoreline, intermittent
	5	20	Man-made shoreline
	5	40	Indefinite shoreline
	5	60	Apparent shoreline
	6	0	River
	6	1	River, intermittent
	6	2	River, submerged
	6	20	Stream
	6	21	Stream, intermittent
	6	22	Stream, submerged
	6	30	Wash or ephemeral drain
	6	40	Braided stream
	6	50	Rapids
	7	0	Dam or weir
	7	1	Dam or weir, earthen construction
	7	2	Dam or weir, carrying a road
	7	3	Dam or weir, earthen construction and carrying a road
	7	10	Spillway
	7	20	Canal or ditch
	7	21	Canal or ditch, navigable
	7	22	Canal or ditch, intermittent
	7	23	Canal or ditch, abandoned
	7	50	Aqueduct or water tunnel
	7	51	Aqueduct or water tunnel, elevated
	7	52	Aqueduct or water tunnel, overpass
	7	53	Aqueduct or water tunnel, in tunnel
	7	54	Aqueduct or water tunnel, underground
	7	55	Aqueduct or water tunnel, abandoned
	7	60	Flume
	7	61	Flume, elevated
	7	62	Flume, abandoned
	9	50	Glacial crevasse
	12	10	Class 1 road
	12	11	Class 1 road, elevated
	12	12	Class 1 road, on drawbridge
	12	13	Class 1 road, in tunnel



## Tobin Map Data Products 1:100k Culture and Product Specifications

12	14	Class 1 road, overpassing
12	15	Class 1 road, underpassing
12	20	Class 2 road
12	21	Class 2 road, elevated
12	22	Class 2 road, on drawbridge
12	23	Class 2 road, in tunnel
12	24	Class 2 road, overpassing
12	25	Class 2 road, underpassing
12	30	Class 3 road
12	31	Class 3 road, elevated
12	32	Class 3 road, on drawbridge
12	33	Class 3 road, in tunnel
12	34	Class 3 road, overpassing
12	35	Class 3 road, underpassing
12	36	Class 3 road, in service facility
12	40	Class 4 road
12	41	Class 4 road, underpassing
12	42	Class 4 road, in ford
12	43	Class 4 road, in service facility
12	50	Class 5 road
12	51	Class 5 road, 4-wheel drive
12	52	Class 5 road, old railroad grade
12	53	Class 5 road, in ford
12	70	Road in transition
12	75	Nonstandard section of road
14	10	Drawbridge
14	20	Covered bridge
14	30	Footbridge
14	40	Road ferry crossing
15	0	Perimeter of parking area
18	0	Railroad
18	1	Railroad, underpassing
18	2	Railroad, overpassing
18	3	Railroad, in tunnel
18	4	Railroad, in snowshed
18	5	Railroad, elevated
18	6	Railroad, on drawbridge
18	20	Siding or spur
18	21	Siding or spur, underpassing
18	22	Siding or spur, overpassing
18	23	Siding or spur, in tunnel
18	24	Siding or spur, in snowshed
18	25	Siding or spur, elevated
18	26	Siding or spur, on drawbridge
18	40	Carline
18	41	Carline, abandoned
18	42	Carline, dismantled
18	50	Cog railroad, incline railway
18	51	Cog railroad, incline railway
18	52	Cog railroad, incline railway
19	0	Yard
23	0	Power transmission line
23	1	Power transmission line, underground
24	0	Pipeline
24	1	Pipeline, above ground
24	2	Pipeline, submerged
25	0	Telephone or telegraph line
25	20	Aerial tramway, monorail, ski lift
25	40	Bridge
25	50	Tunnel



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26	0	Airport or landing strip
26	1	Airport or landing strip, unimproved surface
26	30	Heliport
26	60	Seaplane anchorage
26	70	Seaplane ramp or seaplane landing area
26	90	Launch complex
28	0	Null
28	1	Building
28	2	Cemetery
28	3	Church
28	4	Hospital
28	5	Locale
28	6	Mine
28	7	Oilfield
28	8	Other
28	9	Populated place
28	10	School
28	11	Tower
29	5	Ridge
29	6	Summit
29	9	Pther
29	10	Unknown
29	21	Arch
29	22	Benchmark
29	23	Bend
29	25	Cave
29	29	Gap

<b>Feature Class</b>	<b>Class Code</b>	<b>Type Code</b>	<b>Description</b>
Culture_polygon	3	0	Ocean, bays, estuary, gulf, or sea
	3	1	Ocean, bays, estuary, gulf, or sea navigable
	3	20	Flats (tidal, mud, sand, or gravel)
	3	40	Sand in open water
	3	55	Gut
	3	60	Harbor
	3	65	Carolina bay
	3	70	Obstruction area in water area
	3	75	Spoil area, dredged area, or dump area
	3	80	Holiday area
	4	0	Lake or pond
	4	1	Lake or pond, salt
	4	2	Lake or pond, intermittent
	4	3	Lake or pond, dry
	4	10	Reservoir
	4	20	Area to be submerged
	4	30	Inundation area
	4	40	Gravel pit or quarry filled with water
	4	50	Industrial water impoundment
	4	60	Sewage disposal pond or filtration plant
4	70	Tailings pond or settling basin	
7	95	Covered reservoir	
8	0	Salt evaporator	
8	10	Soda evaporator	
8	20	Fish hatchery, fish farm, or fish pond	
8	30	Duck pond	
8	40	Rice field	
8	50	Cranberry bog	
9	0	Marsh, wetland, swamp, or bog	



## Tobin Map Data Products 1:100k Culture and Product Specifications

9	1	Marsh, wetland, swamp, or bog, submerged
9	2	Marsh, wetland, swamp, or bog, wooded
9	3	Marsh, wetland, swamp, or bog, submerged and wooded
9	4	Marsh, wetland, swamp, or bog, salt
9	5	Marsh, wetland, swamp, or bog, submerged and salt
9	20	Mangrove area
9	40	Glacier or snowfield
9	70	Alkali flat
27	0	Null
27	1	State & national parks & forests
27	2	Military reservation
27	3	Indian reservation
27	4	Wildlife management areas
27	5	Grants, ranchos & others
27	6	Federal reservations
27	7	State reservations
27	8	Unknown, other
29	0	Null
29	1	Area
29	2	Island
29	3	Plain
29	4	Range
29	7	Valley
29	8	Woods
29	24	Cape
29	26	Cliff
29	27	Crater
29	28	Flat
29	30	Isthmus
29	31	Lava
29	33	Pillar
29	34	Slope
29	35	Basin

The listed class and type codes above indicate the Tobin data features that are included in this product and its associated data layers.