

Vernal Pool Distribution - California's Great Valley - 2012 [ds1070]

File Geodatabase Feature Class

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Tags

Great Valley, Sacramento Valley, vernal pools, 2012, San Joaquin Valley, hogwallows, California

Summary

Map showing the distribution of vernal pool habitat in the Great Valley (California) as of 2012. It also analyzes losses since 2005 and contains information on vernal pool habitat that is protected.

Description

This mapping documents the changes in extent and condition of vernal pool habitat in the Great Valley between 2005 and 2012. "Vernal pool habitat" is defined as vernal pools and the surrounding upland (typically grassland) habitat matrix. The 2005 basemap was created by using double-blind mapping protocol and included 21.4 million acres in and surrounding the Sacramento and San Joaquin valleys (Witham et al 2013). The area included in the 2012 remapping effort focused on the 807,820 acres identified in the 2005 map and areas immediately surrounding the previously mapped polygons. Special attention was paid to areas where habitat was being created through mitigation banking. The result of the 2012 remapping shows 764,868 acres of extant habitat. This is down from 2005, a net reduction of 42,952 acres. Habitat actually was eliminated from 47,306 acres, but these losses were partially off-set by 1,679 acres of mitigation banks built since 2005, and by 2,675 acres that we missed in the 2005 mapping. In the seven years since the Recovery Plan was adopted, some 6,758 acres per year on average have been lost. (Link to Report and GIS Data) - <http://www.vernalpools.org/>

Credits

Carol W. Witham, Robert F. Holland and John Vollmar. 2014. Changes in the Distribution of Great Valley Vernal Pool Habitats from 2005 to 2012. Sacramento, CA. Report prepared for the U.S. Fish and Wildlife Service and Bureau of Reclamation CVPIA Habitat Restoration Program under Grant Agreement No. F11AP00169 with the USFWS.

Use limitations

Credit authors

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Extent

West -122.560934 **East** -118.889500
North 40.691536 **South** 35.375931

Scale Range

Maximum (zoomed in) 1:5,000
Minimum (zoomed out) 1:150,000,000

ArcGIS Metadata

Topics and Keywords

* CONTENT TYPE Downloadable Data

EXPORT TO FGDC CSDGM XML FORMAT AS RESOURCE DESCRIPTION No

PLACE KEYWORDS Great Valley, Sacramento Valley, San Joaquin Valley, California

TEMPORAL KEYWORDS 2012

THEME KEYWORDS vernal pools, hogwallows

THEME KEYWORDS biota, environment

THESAURUS

TITLE ISO 19115 Topic Category

HideThesaurus

HideTopics and Keywords

Citation

TITLE Vernal Pool Distribution - California's Great Valley - 2012 [ds1070]

PUBLICATION DATE 2014-08-1300:00:00

PRESENTATION FORMATS * digital map

HideCitation

Citation Contacts

RESPONSIBLE PARTY

INDIVIDUAL'S NAME Robert F. Holland

ORGANIZATION'S NAME Geobotanical Phenomenology

CONTACT'S ROLE originator

RESPONSIBLE PARTY

INDIVIDUAL'S NAME John Vollmar

CONTACT'S ROLE originator

RESPONSIBLE PARTY

INDIVIDUAL'S NAME Carol W. Witham
 ORGANIZATION'S NAME California Native Plant Society
 CONTACT'S ROLE originator

RESPONSIBLE PARTY

INDIVIDUAL'S NAME Carol W. Witham
 CONTACT'S POSITION Co-author
 ORGANIZATION'S NAME California Native Plant Society
 CONTACT'S ROLE point of contact

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[HideCitation Contacts](#)

Resource Details

DATASET LANGUAGES English(UNITED STATES)
 DATASET CHARACTER SET utf8 - 8 bit UCS Transfer Format

STATUS completed

SPATIAL REPRESENTATION TYPE * vector

SUPPLEMENTAL INFORMATION

The 2005 polygons were sketched onto 2005 NAIP imagery by two independent mappers: Carol W. Witham and Robert F. Holland. Maps were reconciled by the mappers on a polygon-by-polygon basis with the best boundaries and attributes for each discussed and chosen before moving onto the next polygon. For the remapping effort based on the 2012 imagery, Holland and Witham divided up the counties and proceeded to map changes. Each polygon was revisited in the 2012 imagery. If changes in land use had occurred, they were immediately visible in the photo. Where needed, the 2005 polygons were cut into smaller polygons to reflect 2012 conditions and the new geodatabase fields were populated. In some cases, additional habitat was identified-either newly created mitigation banks or habitat missed during the 2005 mapping. New polygons were created to reflect these additional areas of habitat.

* PROCESSING ENVIRONMENT Microsoft Windows 10 Version 10.0 (Build 19044) ; Esri ArcGIS 12.9.3.32739

CREDITS

Carol W. Witham, Robert F. Holland and John Vollmar. 2014. Changes in the Distribution of Great Valley Vernal Pool Habitats from 2005 to 2012. Sacramento, CA. Report prepared for the U.S. Fish and Wildlife Service and Bureau of Reclamation CVPIA Habitat Restoration Program under Grant Agreement No. F11AP00169 with the USFWS.

ARCGIS ITEM PROPERTIES

* NAME ds1070
 * LOCATION file://\geodata.\BIOSOnline\Refresh\TODOData\BIOSOnlineData.gdb
 * ACCESS PROTOCOL Local Area Network

[HideResource Details](#)

Extents

EXTENT

DESCRIPTION
 ground condition

TEMPORAL EXTENT

DATE AND TIME 2012-01-01

EXTENT

GEOGRAPHIC EXTENT
 BOUNDING RECTANGLE

EXTENT TYPE Extent used for searching

* WEST LONGITUDE -122.560934
 * EAST LONGITUDE -118.889500
 * NORTH LATITUDE 40.691536
 * SOUTH LATITUDE 35.375931
 * EXTENT CONTAINS THE RESOURCE Yes

EXTENT IN THE ITEM'S COORDINATE SYSTEM

* WEST LONGITUDE -216562.833100
 * EAST LONGITUDE 93889.755900
 * SOUTH LATITUDE -290716.754600
 * NORTH LATITUDE 297258.917100
 * EXTENT CONTAINS THE RESOURCE Yes

[HideExtents](#)

Resource Maintenance

RESOURCE MAINTENANCE
UPDATE FREQUENCY as needed

[HideResource Maintenance](#)

Resource Constraints

CONSTRAINTS
LIMITATIONS OF USE

Credit authors

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[HideResource Constraints](#)

Spatial Reference

ARCgis COORDINATE SYSTEM
* TYPE Projected
* GEOGRAPHIC COORDINATE REFERENCE GCS_North_American_1983
* PROJECTION NAD_1983_California_Teale_Albers
* COORDINATE REFERENCE DETAILS
PROJECTED COORDINATE SYSTEM
WELL-KNOWN IDENTIFIER 3310
X ORIGIN -16909700
Y ORIGIN -8597000
XY SCALE 10000
Z ORIGIN -100000
Z SCALE 10000
M ORIGIN -100000
M SCALE 10000
XY TOLERANCE 0.001
Z TOLERANCE 0.001
M TOLERANCE 0.001
HIGH PRECISION true
LATEST WELL-KNOWN IDENTIFIER 3310
WELL-KNOWN TEXT
PROJCS["NAD_1983_California_Teale_Albers",GEOGCS["GCS_North_American_1983",DATUM["D_North_American_1983",SPHEROID["GRS_1980",6378137.0,298.257

REFERENCE SYSTEM IDENTIFIER
* VALUE 3310
* CODESPACE EPSG
* VERSION 6.8(9.2.0)

[HideSpatial Reference](#)

Spatial Data Properties

VECTOR
* LEVEL OF TOPOLOGY FOR THIS DATASET geometry only

GEOMETRIC OBJECTS
FEATURE CLASS NAME ds1070
* OBJECT TYPE composite
* OBJECT COUNT 0

[HideVector](#)

ARCgis FEATURE CLASS PROPERTIES

FEATURE CLASS NAME ds1070
* FEATURE TYPE Simple
* GEOMETRY TYPE Polygon
* HAS TOPOLOGY FALSE
* FEATURE COUNT 0
* SPATIAL INDEX TRUE
* LINEAR REFERENCING FALSE

[HideArcGIS Feature Class Properties](#)

[HideSpatial Data Properties](#)

Data Quality

SCOPE OF QUALITY INFORMATION
RESOURCE LEVEL dataset

[HideScope of quality information](#)

DATA QUALITY REPORT - ABSOLUTE EXTERNAL POSITIONAL ACCURACY
DIMENSION horizontal

QUANTITATIVE TEST RESULTS

VALUE Minimum Mapping Unit

EVALUATION METHOD

No minimum mapping unit was established prior to mapping. The map therefore suffers from shortfalls related to economy of scale. In small polygons, the mappers were more likely to subtract small cutouts for buildings, corrals or staging areas. In larger polygons, the same size cutout was often overlooked simply because it was small in proportion to the landscape being mapped.

HideData quality report - Absolute external positional accuracy

DATA QUALITY REPORT - ABSOLUTE EXTERNAL POSITIONAL ACCURACY
DIMENSION vertical

MEASURE DESCRIPTION
N/A

HideData quality report - Absolute external positional accuracy

HideData Quality

Geoprocessing history

PROCESS
DATE 2022-09-0210:33:36
TOOL LOCATION c:\program files\arcgis\pro\Resources\ArcToolbox\toolboxes\Conversion Tools.tbx\FeatureClassToFeatureClass
COMMAND ISSUED
INCLUDE IN LINEAGE WHEN EXPORTING METADATA No

PROCESS
DATE 2022-09-0210:34:00
TOOL LOCATION c:\program files\arcgis\pro\Resources\ArcToolbox\toolboxes\Data Management Tools.tbx\Project
COMMAND ISSUED
INCLUDE IN LINEAGE WHEN EXPORTING METADATA No

PROCESS
DATE 2022-09-0210:34:20
TOOL LOCATION c:\program files\arcgis\pro\Resources\ArcToolbox\toolboxes\Data Management Tools.tbx\Rename
COMMAND ISSUED
INCLUDE IN LINEAGE WHEN EXPORTING METADATA No

HideGeoprocessing history

Distribution

DISTRIBUTION FORMAT
* NAME File Geodatabase Feature Class

TRANSFER OPTIONS
ONLINE SOURCE
LOCATION <https://wildlife.ca.gov/Data/BIOS>
FUNCTION PERFORMED information

ONLINE SOURCE
LOCATION <https://www.vernalpool.org/>
FUNCTION PERFORMED information

ONLINE SOURCE
LOCATION https://filelib.wildlife.ca.gov/Public/BDB/GIS/BIOS/Public_Datasets/1000_1099/ds1070.zip
FUNCTION PERFORMED download

HideDistribution

Fields

DETAILS FOR OBJECT [ds1070](#)
TYPE Feature Class
ROW COUNT 2456
DEFINITION
Polygons representing vernal pool landscapes and individual vernal pools
DEFINITION SOURCE
Witham/Holland

FIELD OBJECTID

ALIAS OBJECTID
DATA TYPE OID
WIDTH 4
PRECISION 0
SCALE 0

FIELD DESCRIPTION

Internal feature number.

DESCRIPTION SOURCE

Esri

DESCRIPTION OF VALUES

Sequential unique whole numbers that are automatically generated.

HideFieldOBJECTID

FIELD Shape

ALIAS Shape

DATA TYPE Geometry

WIDTH 0

PRECISION 0

SCALE 0

FIELD DESCRIPTION

Feature geometry.

DESCRIPTION SOURCE

Esri

DESCRIPTION OF VALUES

Coordinates defining the features.

HideFieldShape

FIELD FEATURE

ALIAS FEATURE

DATA TYPE SmallInteger

WIDTH 2

PRECISION 0

SCALE 0

FIELD DESCRIPTION

Vernal pool matrix or individual pool.

DESCRIPTION SOURCE

Witham/Holland

LIST OF VALUES

VALUE 0

DESCRIPTION Vernal pool matrix

VALUE 1

DESCRIPTION Individual vernal pool

HideFieldFEATURE

FIELD COVER_VPs

ALIAS COVER_VPs

DATA TYPE SmallInteger

WIDTH 2

PRECISION 0

SCALE 0

FIELD DESCRIPTION

Cover of vernal pools by cover class.

DESCRIPTION SOURCE

Witham/Holland

LIST OF VALUES

VALUE 0

DESCRIPTION <2% cover of vernal pools

VALUE 1

DESCRIPTION 2-5% cover of vernal pools

VALUE 2

DESCRIPTION 5-10% cover of vernal pools

VALUE 3

DESCRIPTION >10% cover of vernal pools

VALUE 4

DESCRIPTION 100% (individual pool / stockpond)

HideFieldCOVER_VPs

FIELD DENSITY_VPs

ALIAS DENSITY_VPs

DATA TYPE SmallInteger

WIDTH 2
 PRECISION 0
 SCALE 0
 FIELD DESCRIPTION
 Qualitative density assessment.
 DESCRIPTION SOURCE
 Witham/Holland
 LIST OF VALUES
 VALUE 0
 DESCRIPTION Low

VALUE 1
 DESCRIPTION Medium

VALUE 2
 DESCRIPTION High

HideFieldDENSITY_VPs

FIELD DIVERSITY_VPs
 ALIAS DIVERSITY_VPs
 DATA TYPE SmallInteger
 WIDTH 2
 PRECISION 0
 SCALE 0
 FIELD DESCRIPTION
 Qualitative diversity assessment.
 DESCRIPTION SOURCE
 Witham/Holland
 LIST OF VALUES
 VALUE 0
 DESCRIPTION Low

VALUE 1
 DESCRIPTION Medium

VALUE 2
 DESCRIPTION High

HideFieldDIVERSITY_VPs

FIELD NUMBER_LargePools
 ALIAS NUMBER_LargePools
 DATA TYPE SmallInteger
 WIDTH 2
 PRECISION 0
 SCALE 0
 FIELD DESCRIPTION
 Number of large pools per polygon.
 DESCRIPTION SOURCE
 Witham/Holland
 LIST OF VALUES
 VALUE 0
 DESCRIPTION None in polygon

VALUE 1
 DESCRIPTION <1 per 640 acres

VALUE 2
 DESCRIPTION 1-3 per 640 acres

VALUE 3
 DESCRIPTION 4+ per 640 acres

HideFieldNUMBER_LargePools

FIELD DISTURBANCE_Area
 ALIAS DISTURBANCE_Area
 DATA TYPE SmallInteger
 WIDTH 2
 PRECISION 0
 SCALE 0
 FIELD DESCRIPTION
 Cover of disturbance by cover class.
 DESCRIPTION SOURCE

Witham/Holland

LIST OF VALUES

VALUE 0

DESCRIPTION <1% of polygon

VALUE 1

DESCRIPTION 1-5% polygon

VALUE 2

DESCRIPTION 5-25% of polygon

VALUE 3

DESCRIPTION 25-50% of polygon

VALUE 4

DESCRIPTION 50-99% of polygon

VALUE 5

DESCRIPTION 100% of polygon

HideFieldDISTURBANCE_Area

FIELD DISTURBANCE_Type

ALIAS DISTURBANCE_Type

DATA TYPE SmallInteger

WIDTH 2

PRECISION 0

SCALE 0

FIELD DESCRIPTION

Dominant type of disturbance.

DESCRIPTION SOURCE

Witham/Holland

LIST OF VALUES

VALUE 0

DESCRIPTION None / unknown

VALUE 1

DESCRIPTION Plowing, disking or grading

VALUE 2

DESCRIPTION OHV use

VALUE 3

DESCRIPTION Ranch roads

VALUE 4

DESCRIPTION Paved roads

VALUE 5

DESCRIPTION Ag runoff (altered hydrology)

VALUE 6

DESCRIPTION Agricultural residential

VALUE 7

DESCRIPTION Managed wetlands (duck ponds)

VALUE 8

DESCRIPTION Mitigation banks (created vernal pools)

HideFieldDISTURBANCE_Type

FIELD DISTURBANCE_Intensity

ALIAS DISTURBANCE_Intensity

DATA TYPE SmallInteger

WIDTH 2

PRECISION 0

SCALE 0

FIELD DESCRIPTION

Qualitative assessment of intensity of disturbance.

DESCRIPTION SOURCE

Witham/Holland

[HideFieldDISTURBANCE_Intensity](#)

FIELD HABITAT_Notes

ALIAS HABITAT_Notes

DATA TYPE String

WIDTH 50

PRECISION 0

SCALE 0

FIELD DESCRIPTION

Notes on habitat observations.

DESCRIPTION SOURCE

Witham/Holland

[HideFieldHABITAT_Notes](#)

FIELD MAPPING_Notes

ALIAS MAPPING_Notes

DATA TYPE String

WIDTH 50

PRECISION 0

SCALE 0

FIELD DESCRIPTION

Notes used during heads up digitizing.

DESCRIPTION SOURCE

Witham/Holland

[HideFieldMAPPING_Notes](#)

FIELD COUNTY

ALIAS COUNTY

DATA TYPE String

WIDTH 25

PRECISION 0

SCALE 0

FIELD DESCRIPTION

County in which habitat polygon occurs.

DESCRIPTION SOURCE

Witham/Holland

[HideFieldCOUNTY](#)

FIELD Acres

ALIAS Acres

DATA TYPE Double

WIDTH 8

PRECISION 0

SCALE 0

FIELD DESCRIPTION

Acres calculated from Shape_area.

DESCRIPTION SOURCE

Witham/Holland

ACCURACY INFORMATION

ACCURACY Calculated as Shape_area/4046.825 m2/acre

[HideFieldAcres](#)

FIELD Converted_2012

ALIAS Converted_2012

DATA TYPE String

WIDTH 50

PRECISION 0

SCALE 0

[HideFieldConverted_2012](#)

FIELD Converted_To_2012

ALIAS Converted_To_2012

DATA TYPE SmallInteger

WIDTH 2

PRECISION 0

SCALE 0

[HideFieldConverted_To_2012](#)

FIELD Converted_Notes_2012

ALIAS Converted_Notes_2012

DATA TYPE String

WIDTH 50

PRECISION 0

SCALE 0

HideFieldConverted_Notes_2012

FIELD Disturbance_Area_2012

ALIAS Disturbance_Area_2012
DATA TYPE SmallInteger
WIDTH 2
PRECISION 0
SCALE 0

HideFieldDisturbance_Area_2012

FIELD Disturbance_Type_2012

ALIAS Disturbance_Type_2012
DATA TYPE SmallInteger
WIDTH 2
PRECISION 0
SCALE 0

HideFieldDisturbance_Type_2012

FIELD Disturbance_Intensity_2012

ALIAS Disturbance_Intensity_2012
DATA TYPE SmallInteger
WIDTH 2
PRECISION 0
SCALE 0

HideFieldDisturbance_Intensity_2012

FIELD Land_Use_Area

ALIAS Land_Use_Area
DATA TYPE SmallInteger
WIDTH 2
PRECISION 0
SCALE 0

HideFieldLand_Use_Area

FIELD Surrounding_Land_Use_1

ALIAS Surrounding_Land_Use_1
DATA TYPE SmallInteger
WIDTH 2
PRECISION 0
SCALE 0

HideFieldSurrounding_Land_Use_1

FIELD Surrounding_Land_Use_2

ALIAS Surrounding_Land_Use_2
DATA TYPE SmallInteger
WIDTH 2
PRECISION 0
SCALE 0

HideFieldSurrounding_Land_Use_2

FIELD Surrounding_Land_Use_3

ALIAS Surrounding_Land_Use_3
DATA TYPE SmallInteger
WIDTH 2
PRECISION 0
SCALE 0

HideFieldSurrounding_Land_Use_3

FIELD New_Notes

ALIAS New_Notes
DATA TYPE String
WIDTH 50
PRECISION 0
SCALE 0

HideFieldNew_Notes

FIELD Shape_Length

ALIAS Shape_Length
DATA TYPE Double
WIDTH 8
PRECISION 0
SCALE 0
FIELD DESCRIPTION
Length of feature in internal units.
DESCRIPTION SOURCE
Esri
DESCRIPTION OF VALUES
Positive real numbers that are automatically generated.

HideFieldShape_Length

FIELD Shape_Area

ALIAS Shape_Area
DATA TYPE Double
WIDTH 8
PRECISION 0
SCALE 0
FIELD DESCRIPTION
Area of feature in internal units squared.
DESCRIPTION SOURCE
Esri
DESCRIPTION OF VALUES
Positive real numbers that are automatically generated.

HideFieldShape_Area

HideDetails for objectds1070

HideFields

References

AGGREGATE INFORMATION
ASSOCIATION TYPE cross reference

AGGREGATE RESOURCE NAME
TITLE Changes in the Distribution of Great Valley Vernal Pool Habitats from 2005 to 2012

RESPONSIBLE PARTY
ORGANIZATION'S NAME Robert F. Holland
CONTACT'S ROLE originator

RESPONSIBLE PARTY
ORGANIZATION'S NAME Carol W. Witham
CONTACT'S ROLE originator

RESPONSIBLE PARTY
ORGANIZATION'S NAME John Vollmar
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RESPONSIBLE PARTY
CONTACT'S ROLE publisher

CONTACT INFORMATION
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DELIVERY POINT Sacramento, CA

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HideAggregate resource name

[HideReferences](#)

Metadata Details

METADATA LANGUAGE English(UNITED STATES)
METADATA CHARACTER SET utf8 - 8 bit UCS Transfer Format

SCOPE OF THE DATA DESCRIBED BY THE METADATA dataset
SCOPE NAME * dataset

* LAST UPDATE 2022-09-02

ARCGIS METADATA PROPERTIES
METADATA FORMAT ArcGIS1.0
STANDARD OR PROFILE USED TO EDIT METADATA FGDC

CREATED IN ARCGIS FOR THE ITEM 2022-09-0210:33:53
LAST MODIFIED IN ARCGIS FOR THE ITEM 2022-09-0210:33:34

AUTOMATIC UPDATES
HAVE BEEN PERFORMED Yes
LAST UPDATE 2022-09-0210:33:34

[HideMetadata Details](#)

Metadata Contacts

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CONTACT'S POSITION Co-author
ORGANIZATION'S NAME California Native Plant Society
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[HideContact information](#)

[HideMetadata Contacts](#)

Metadata Maintenance

MAINTENANCE
UPDATE FREQUENCY not planned

[HideMetadata Maintenance](#)

Thumbnail and Enclosures

THUMBNAIL

[HideThumbnail and Enclosures](#)