

Identification_Information:

Citation:

Citation_Information:

Originator: Skotnicki, S.J.

Publication_Date: 20020800

Title: Geologic map of the Buckeye 7.5' quadrangle, Maricopa County, Arizona

Series_Information:

Series_Name: Arizona Geological Survey Digital Geologic Map

Issue_Identification: DGM-15

Geospatial_Data_Presentation_Form: Map

Publication_Information:

Publication_Place: Tucson, AZ

Publisher: Arizona Geological Survey

Description:

Abstract: The Buckeye quadrangle is located directly south of the town of Buckeye, approximately 40 km west of Phoenix, Arizona. The area is in the heart of the Buckeye Hills, defined by steep hills surrounded by broad granite pediments and bajadas. The Gila River flows through the northern part of the quad. The area was mapped contemporaneously with the adjacent Avondale SW 7.5' quadrangle, between November 2001 and April 2002. Field work was performed two days a week, for a total of approximately 36 days of field work for both quads. A 1:24,000 scale map is the primary product of this study (Plate 1). Mapping was done under the joint State-Federal STATEMAP program, as specified in the National Geologic Mapping Act of 1992, and was jointly funded by the Arizona Geological Survey and the U.S. Geological Survey under STATEMAP Program Contract #01HQAG098. Interested readers should be aware that updates of the digital map coverage could be released in the future.

Purpose: This geologic mapping southeast of Tucson is part of continuing efforts by the AZGS to map the geology of the Phoenix - Tucson urban corridor. This map builds on and complements previous and concurrent geologic mapping efforts in the Tucson area and is intended to enhance our understanding of the geology of the area and to aid in assessing and understanding geologic hazards.

Time_Period_of_Content:

Time_Period_Information:

Single_Date/Time:

Calendar_Date: 20020800

Currentness_Reference: publication date

Status:

Progress: Complete

Maintenance_and_Update_Frequency: Unknown

Spatial_Domain:

Bounding_Coordinates:

West_Bounding_Coordinate: -112.625

East_Bounding_Coordinate: -112.50

North_Bounding_Coordinate: 33.375

South_Bounding_Coordinate: 33.25

Keywords:

Theme:

Theme_Keyword_Thesaurus: None

Theme_Keyword: digital cartography

Theme_Keyword: digital geologic map

Theme_Keyword: surficial geology

Theme_Keyword: bedrock geology

Place:

Place_Keyword_Thesaurus: None

Place_Keyword: Buckeye 7.5' quadrangle
Place_Keyword: Maricopa County
Place_Keyword: Arizona
Place_Keyword: U.S.A.
Place_Keyword: Buckeye Hills
Place_Keyword: Gila River
Access_Constraints: None
Use_Constraints: Not to be reproduced for commercial purposes
Point_of_Contact:
 Contact_Information:
 Contact_Organization_Primary:
 Contact_Organization: Arizona Geological Survey
 Contact_Position: GIS Technician
 Contact_Address:
 Address_Type: mailing and physical address
 Address: 416 W. Congress St., # 100
 City: Tucson
 State_or_Province: Arizona
 Postal_Code: 85701
 Country: U.S.A.
 Contact_Voice_Telephone: 520-770-3500
 Contact_Facsimile_Telephone: 520-770-3505
 Hours_of_Service: 8:00 a.m to 5:00 p.m., M-F
 Native_Data_Set_Environment: Adobe® PDF format files
Data_Quality_Information:
 Attribute_Accuracy:
 Attribute_Accuracy_Report: Although no formal tests were performed, the location and existence of objects, as well as object attribution, were tested for accuracy against the paper source maps from which the source dataset was digitized by direct visual comparison between the source maps and the digital dataset.
 Logical_Consistency_Report: Logically consistent
 Completeness_Report: Data completeness reflects the content of the source maps.
 Lineage:
 Source_Information:
 Source_Citation:
 Citation_Information:
 Originator: Skotnicki, S.J.
 Title: Unpublished geologic field sheets from bedrock mapping in the Buckeye 7.5' quadrangle, Maricopa County, Arizona (published here)
 Publication_Date: unpublished material
 Geospatial_Data_Presentation_Form: map
 Source_Scale_Denominator: 24000
 Type_of_Source_Media: paper maps
 Source_Time_Period_of_Content:
 Time_Period_Information:
 Single_Date/Time:
 Calendar_Date: 20020600
 Source_Currentness_Reference: ground condition
 Source_Citation_Abbreviation: bedrock mapping
 Source_Contribution: sources used to compile the new bedrock mapping for the Buckeye 7.5' quadrangle
 Source_Information:
 Source_Citation:
 Citation_Information:
 Originator: BLM

Publication_Date: 1978
Title: BLM ariel photos, approximately 1:30,000 scale, color, dated
19780612
Geospatial_Data_Presentation_Form: aerial photograph
Other_Citation_Details: mylar sheets are same size as photos and are
still attached to photos.
Source_Scale_Denominator: 24000
Type_of_Source_Media: photographic paper
Source_Time_Period_of_Content:
Time_Period_Information:
Single_Date/Time:
Calendar_Date: 19780612
Source_Currentness_Reference: ground condition
Source_Citation_Abbreviation: photos
Source_Contribution: source used to compile surficial geologic mapping for
the Buckeye 7.5' quadrangle
Process_Step:
Process_Description:
(1) Field sheets were scanned as tiff images, registered and rectified
in ArcInfo, then digitized using ArcEdit
(2) Mylar overlays were scanned as tiff images, registered and rectified
in ArcInfo, then digitized using ArcEdit
(3) ArcInfo coverages were edited and appended using ArcEdit
(4) ArcInfo coverages were attributed using ArcView
Source_Used_Citation_Abbreviation: bedrock mapping
Source_Used_Citation_Abbreviation: photos

Process_Date: 20020600
Source_Produced_Citation_Abbreviation: bedrock coverage
Process_Contact:
Contact_Information:
Contact_Organization_Primary:
Contact_Organization: Arizona Geological Survey
Contact_Person: Skotnicki, S.J.
Contact_Address:
Address_Type: mailing and physical address
Address: 416 W. Congress St., Suite 100
City: Tucson
State_or_Province: Arizona
Postal_Code: 85701
Country: U.S.A.
Contact_Voice_Telephone: 520-770-3500
Contact_Facsimile_Telephone: 520-770-3505
Process_Step:
Process_Description:
(1) Surficial geology was mapped onto mylar overlain onto air photos
using photogeologic interpretation
(2) Mapping was spot checked in the field to test accuracy of map unit
assignments
(3) Mylar linework was scanned as tiff images and registered and
rectified in ArcInfo.
Source_Used_Citation_Abbreviation: BLM air photos
Process_Date: 19780612
Source_Produced_Citation_Abbreviation: surficial mapping
Process_Contact:
Contact_Information:
Contact_Organization_Primary:

Contact_Organization: Arizona Geological Survey
Contact_Person: Skotnicki, S.J.
Contact_Address:
Address_Type: mailing and physical address
Address: 416 W. Congress St., Suite 100
City: Tucson
State_or_Province: Arizona
Postal_Code: 85701
Country: U.S.A.
Contact_Voice_Telephone: 520-770-3500
Contact_Facsimile_Telephone: 520-770-3505

Spatial_Data_Organization_Information:
Direct_Spatial_Reference_Method: raster

Spatial_Reference_Information:
Horizontal_Coordinate_System_Definition:
Planar:
Grid_Coordinate_System:
Grid_Coordinate_System_Name: Universal Transverse Mercator
Universal_Transverse_Mercator:
UTM_Zone_Number: 12
Transverse_Mercator:
Scale_Factor_at_Central_Meridian: 0.999600
Longitude_of_Central_Meridian: -117.000000
Latitude_of_Projection_Origin: 0.000000
False_Easting: 500000.000000
False_Northing: 0.000000

Planar_Coordinate_Information:
Planar_Coordinate_Encoding_Method: Coordinate pair
Coordinate_Representation:
Abscissa_Resolution: 1
Ordinate_Resolution: 1
Planar_Distance_Units: Meters

Geodetic_Model:
Horizontal_Datum_Name: North American Datum of 1927
Ellipsoid_Name: Clarke 1866
Semi-major_Axis: 6378206.4000000
Denominator_of_Flattening_Ratio: 294.98

Entity_and_Attribute_Information:
Overview_Description:
Entity_and_Attribute_Overview: This dataset includes two Adobe® PDF files that represent the text and plate 1 of a detailed, 1:24,000 layout scale geologic map of the Mount Fagan 7.5' quadrangle.
Entity_and_Attribute_Detail_Citation: n/a

Distribution_Information:
Distributor:
Contact_Information:
Contact_Organization_Primary:
Contact_Organization: Arizona Geological Survey
Contact_Position: Publication Sales Department
Contact_Address:
Address_Type: mailing and physical address
Address: 416 W. Congress St., # 100
City: Tucson
State_or_Province: Arizona
Postal_Code: 85701
Country: U.S.A.
Contact_Voice_Telephone: 520-770-3500

Contact_Facsimile_Telephone: 520-770-3505

Hours_of_Service: 8:00 a.m to 5:00 p.m., M-F

Resource_Description: AZGS DGM-15: Geologic map of the Buckeye 7.5' quadrangle, Maricopa County, Arizona

Distribution_Liability: Although these data have been processed successfully on a computer system at the Arizona Geological Survey, no warranty expressed or implied is made regarding the accuracy or utility of the data on any other system or for general or scientific purposes, nor shall the act of distribution constitute any such warranty. This disclaimer applies both to individual use of the data and aggregate use with other data. It is strongly recommended that these data are directly acquired from the Arizona Geological Survey, and not indirectly through other sources which may have changed the data in some way. It is also strongly recommended that careful attention be paid to the contents of the metadata file associated with these data. The Arizona Geological Survey shall not be held liable for improper or incorrect use of the data described and/or contained herein.

Standard_Order_Process:

Digital_Form:

Digital_Transfer_Information:

Format_Name: Adobe® PDF format

Digital_Transfer_Option:

Offline_Option:

Offline_Media: CD-ROM

Recording_Format: Joliet

Compatibility_Information: Windows 95/98/NT4.0/2000

Fees: \$15.00

Ordering_Instructions: Publications and maps may be purchased by mail or in person from the AZGS office in Tucson. Call for information or visit the AZGS website at www.azgs.state.az.us to view a list of publications and to print out an order form.

Metadata_Reference_Information:

Metadata_Date: 20020827

Metadata_Contact:

Contact_Information:

Contact_Organization_Primary:

Contact_Organization: Arizona Geological Survey

Contact_Position: GIS Technician

Contact_Address:

Address_Type: Mailing and physical address

Address: 416 W. Congress St., # 100

City: Tucson

State_or_Province: Arizona

Postal_Code: 85701

Country: U.S.A.

Contact_Voice_Telephone: 520-770-3500

Contact_Facsimile_Telephone: 520-770-3505

Hours_of_Service: 8:00 a.m to 5:00 p.m., M-F

Metadata_Standard_Name: FGDC CSDGM

Metadata_Standard_Version: FGDC-STD-001-1998