



Virginia Commonwealth University, Center for Environmental Studies
Coastal GEMS Maintenance: FY09 Annual Report

October 1st 2009 – September 30th 2010

NOAA Grant #NA09NOS4190163

Grant Year FY2009, Task #93.01



Virginia Coastal Zone
MANAGEMENT PROGRAM



Acknowledgements

This report was prepared by the Virginia Coastal Zone Management Program's Coastal GIS Coordinator. The Coastal GIS Coordinator position is provided through a contract with Virginia Commonwealth University's Center for Environmental Studies and is funded by the Virginia Coastal Zone Management Program at the Virginia Department of Environmental Quality through Grant #NA09NOS4190163 from the U.S. Department of Commerce, National Oceanic and Atmospheric Administration, under the Coastal Zone Management Act of 1972, as amended.

Introduction

This report outlines work performed under task #93.01 by staff of Virginia Commonwealth University's Center for Environmental Studies during the grant year FY2009 (October 1st 2009 – September 30th 2010).

In past grant years (FY2007 and FY2008) the final product for task #93.01 has consisted of a completed final project summary form submitted to NOAA with additional final product files attached separately. Submitted as final product for FY2009, this report consolidates the final project summary narrative and additional final product attachments into one file.

Contents

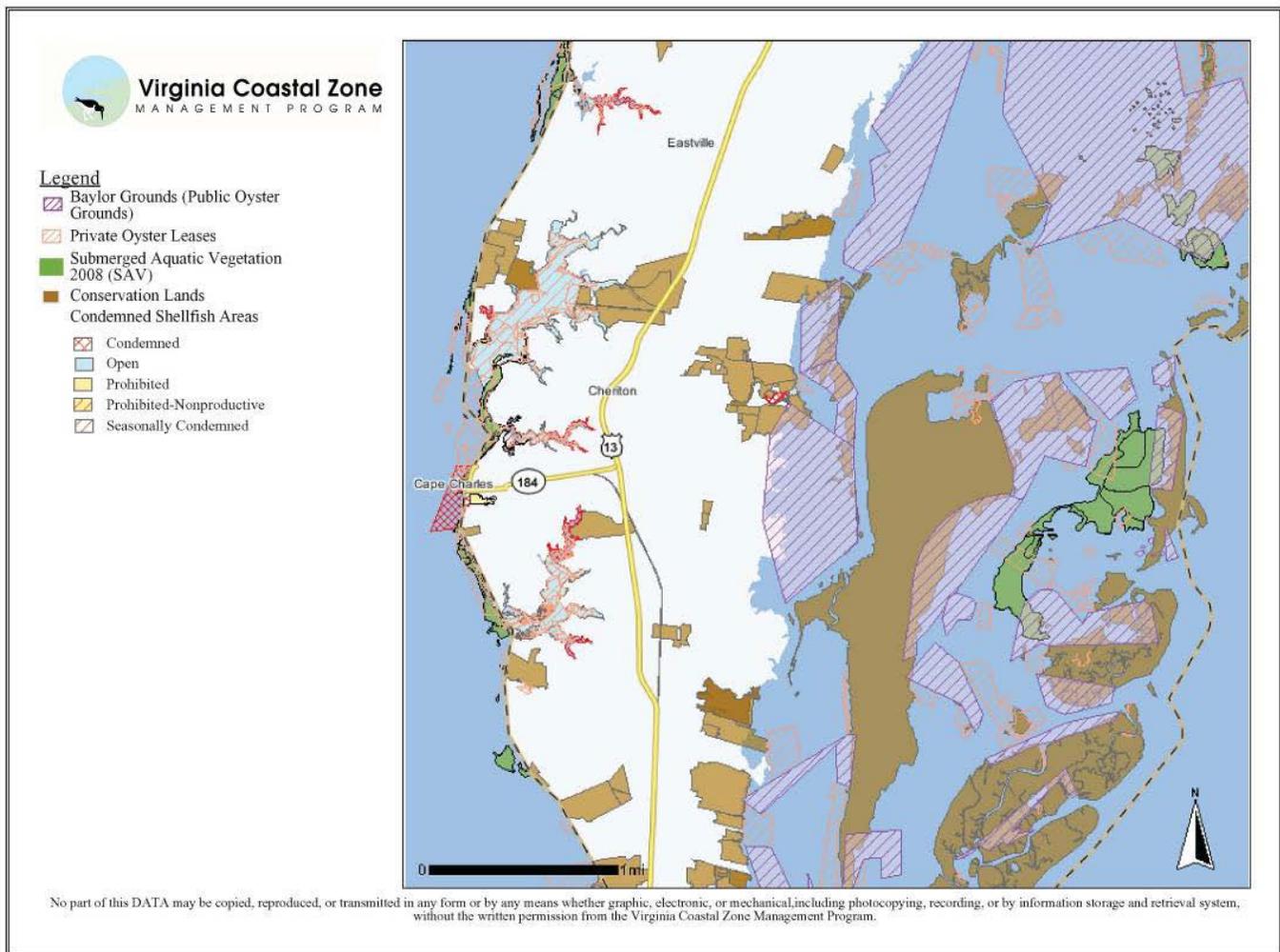
- Coastal GEMS Mapping Application
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 - Google Analytics Report

Virginia Commonwealth University's Center for Environmental Studies (VCU CES) continued to host the Coastal GEMS online mapping application through the FY09 grant period and VCU CES staff performed routine maintenance and updates on Coastal GEMS during this time.

Tasks were to refresh map services, to update data and cartography in the map file as per CZM staff request, and to install software and security upgrades. Coastal Gems remained operational throughout the FY09 grant period and was only offline to install software/security updates or to refresh map services.

During the FY09 grant period, at CZM staff request, VCU CES staff updated the data and symbology on six currently in production GEMS layers and added four new data layers to the application.

Layers updated in this period include: SAV Coverage, Seaside Phragmites, Conservation Lands, Public Oyster (Baylor) Grounds, Private Oyster Leases, and Condemned Shellfish Areas
Layers added in this period include: 3 Nautical Mile and 12 Nautical Mile reference layers, Priority Conservation Areas, and Potential Wetland Restoration

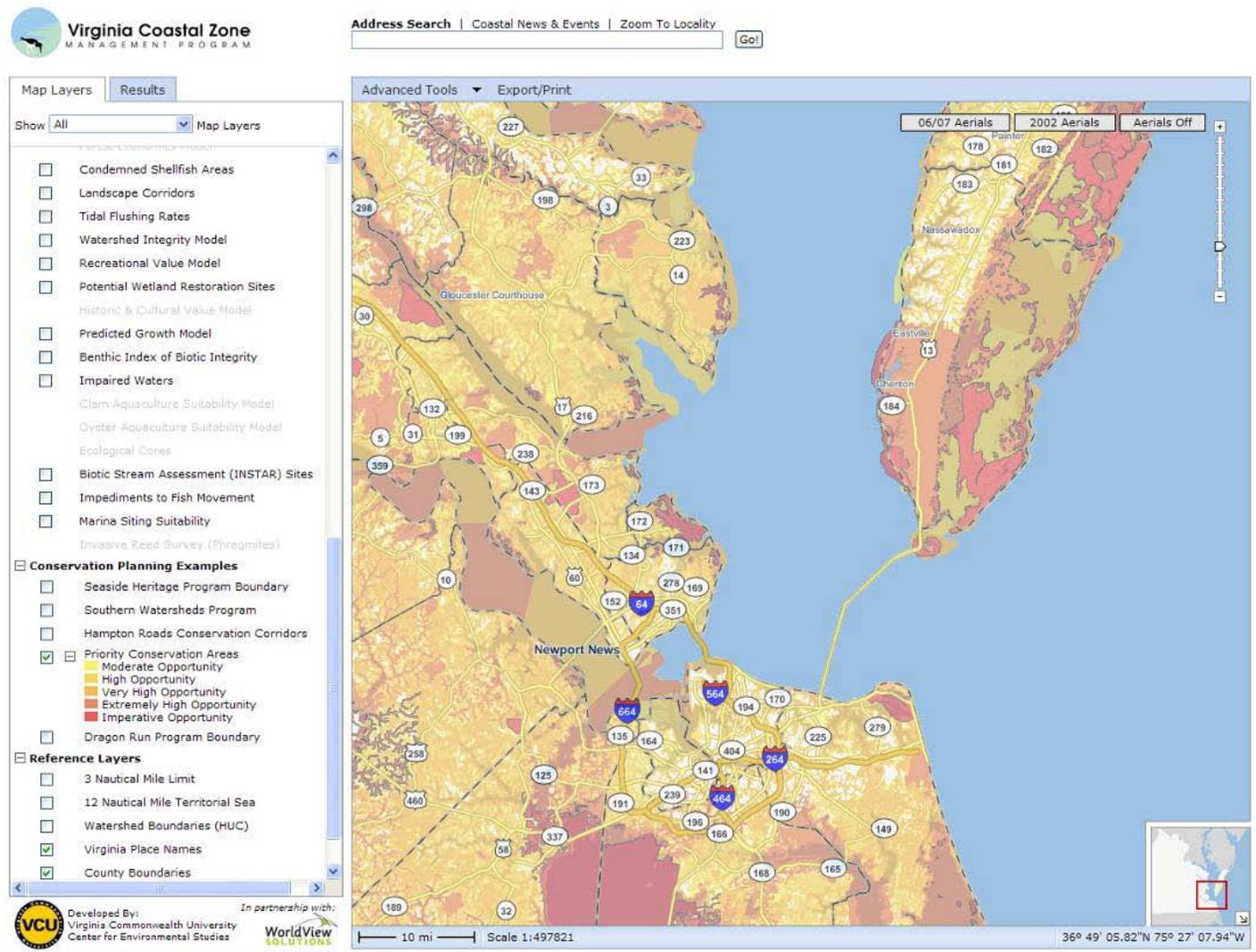


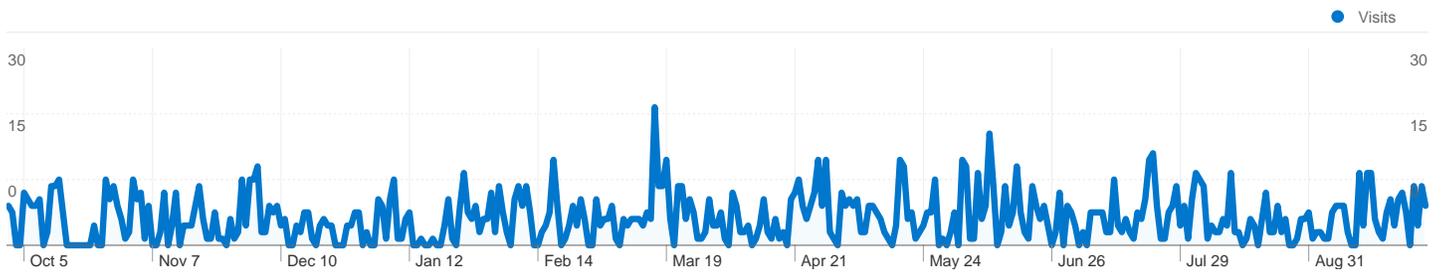
The map above was exported from Coastal GEMS and displays the layers updated during the FY2009 grant year. To see more visit Coastal GEMS at www.coastalgems.org.

Google Analytics services for Coastal GEMS set up by VCU CES staff remained operational throughout the FY09 grant period. Google Analytics sends an email PDF report to CZM staff weekly to show access and web statistics for the Gems application and VCU CES staff created additional reports at CZM staff request by querying specific date ranges.

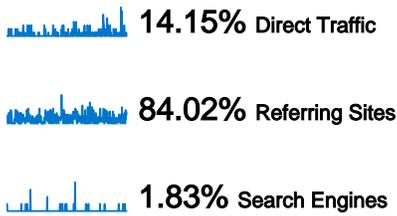
From October 1, 2009 to September 30, 2010, Coastal GEMS received 1,527 visits from 743 unique visitors resulting in 1,990 pageviews and an average site visit time of 1 minute and 44 seconds. The full Google Analytics report for the Coastal GEMS mapping application during the FY09 grant period can be found on the following four pages.

Below is a screenshot from the GEMS application showing the Priority Conservation Areas layer. To see more visit Coastal GEMS at www.coastalgems.org.





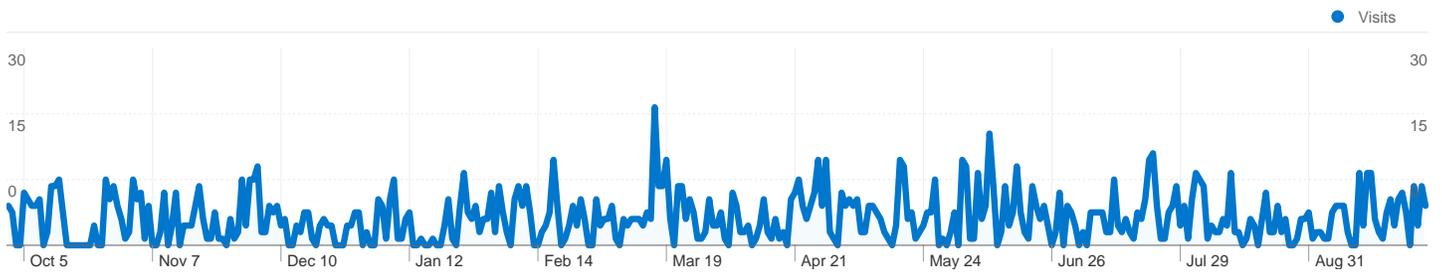
All traffic sources sent a total of 1,527 visits



- **Referring Sites**
1,283.00 (84.02%)
- **Direct Traffic**
216.00 (14.15%)
- **Search Engines**
28.00 (1.83%)

Top Traffic Sources

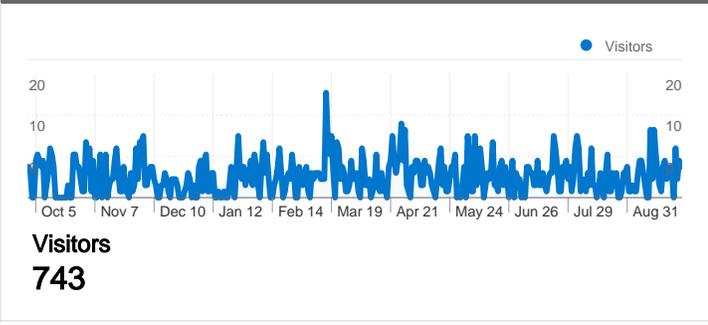
Sources	Visits	% visits	Keywords	Visits	% visits
deq.virginia.gov (referral)	630	41.26%	virginia coastal gems	5	17.86%
deq.state.va.us (referral)	600	39.29%	classification of gems	3	10.71%
(direct) ((none))	216	14.15%	12 digit huc james river virginia	1	3.57%
google (organic)	20	1.31%	12-digit huc maps virginia	1	3.57%
bluecrab.info (referral)	16	1.05%	accomack county hucs	1	3.57%



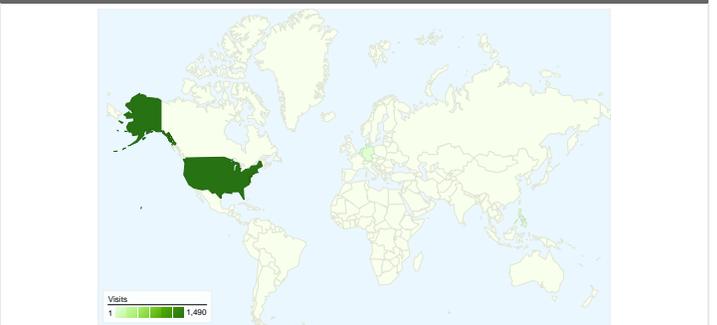
Site Usage

1,527 Visits
 83.04% Bounce Rate
1,990 Pageviews
 00:01:44 Avg. Time on Site
1.30 Pages/Visit
 45.58% % New Visits

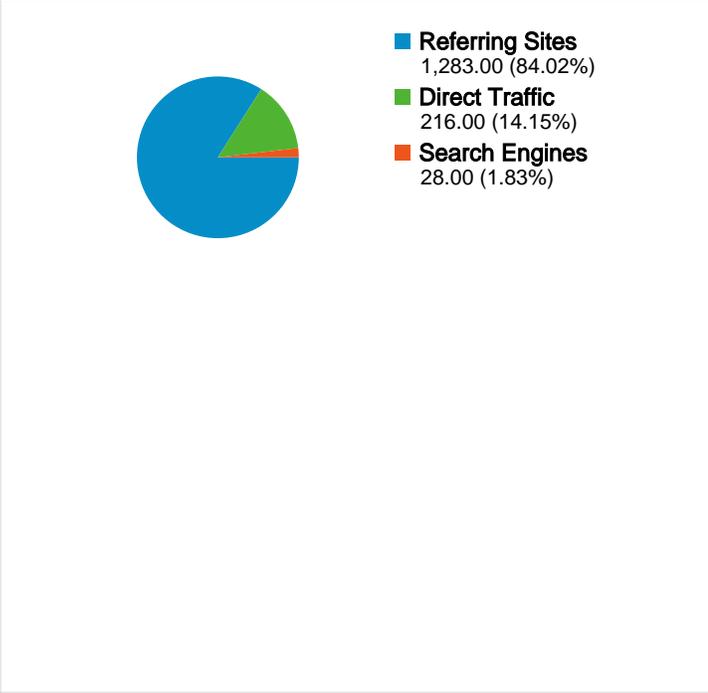
Visitors Overview



Map Overlay



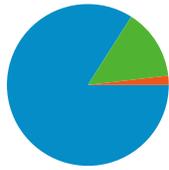
Traffic Sources Overview



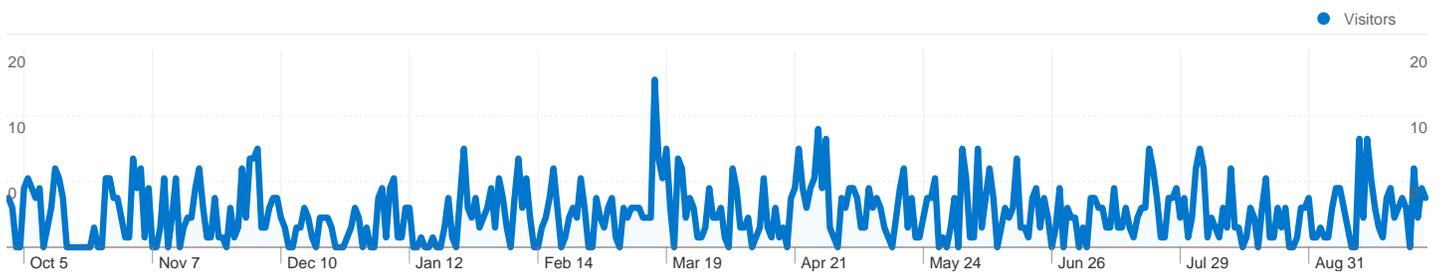
Content Overview

Pages	Pageviews	% Pageviews
/gems2/	1,911	96.03%
/gems2/mapper.aspx	27	1.36%
/gems2/?resetcache=23	10	0.50%
/gems2/?resetcache=24	5	0.25%
/gems2/?resetcache=47	3	0.15%

Traffic Sources Overview



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743 people visited this site

 **1,527** Visits

 **743** Absolute Unique Visitors

 **1,990** Pageviews

 **1.30** Average Pageviews

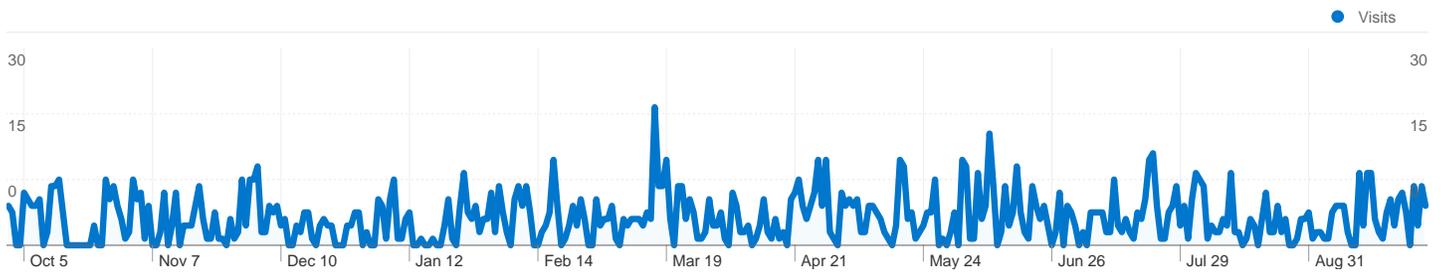
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 **45.58%** New Visits

Technical Profile

Browser	Visits	% visits	Connection Speed	Visits	% visits
Internet Explorer	1,146	75.05%	Unknown	634	41.52%
Firefox	262	17.16%	T1	329	21.55%
Chrome	75	4.91%	DSL	310	20.30%
Safari	40	2.62%	Cable	232	15.19%
Mozilla	2	0.13%	Dialup	19	1.24%

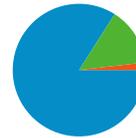


All traffic sources sent a total of 1,527 visits

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 84.02% Referring Sites

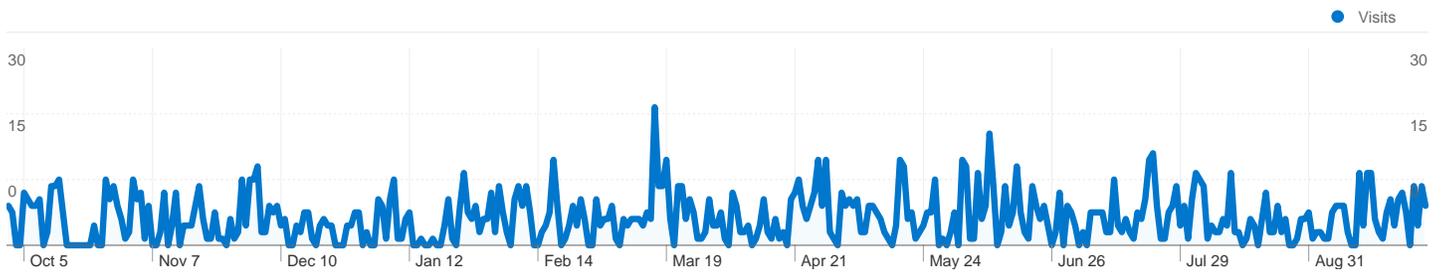
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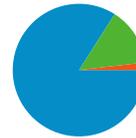


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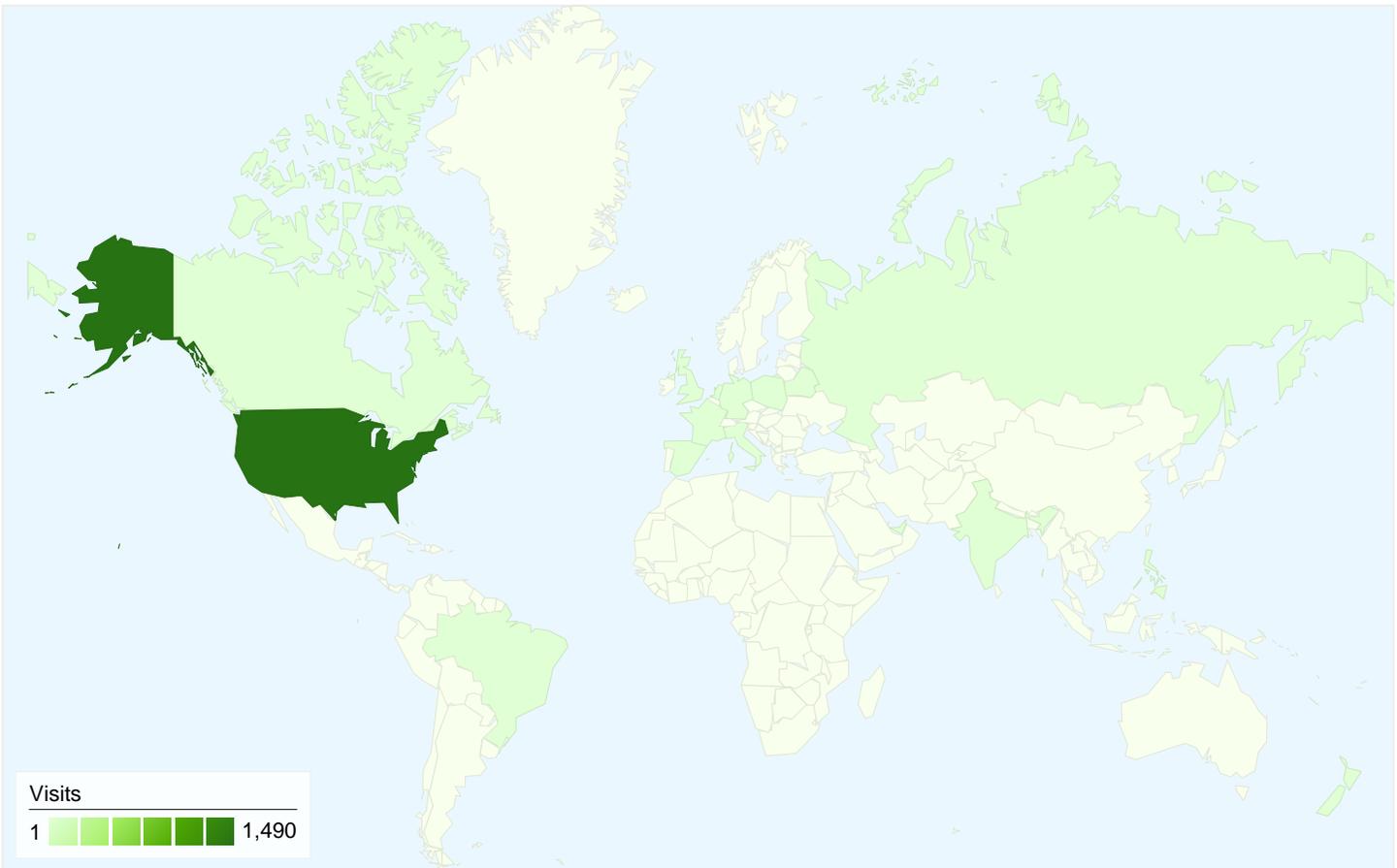
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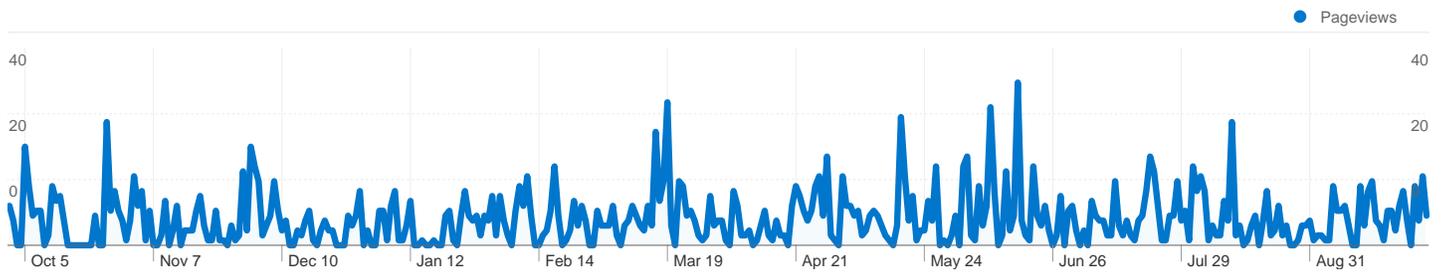


1,527 visits came from 19 countries/territories

Site Usage

Country/Territory	Visits	Pages/Visit	Avg. Time on Site	% New Visits	Bounce Rate
United States	1,490	1.31	00:01:46	44.50%	82.89%
Germany	5	1.00	00:00:00	100.00%	100.00%
Philippines	4	1.00	00:00:00	75.00%	100.00%
Saint Lucia	4	1.50	00:01:50	100.00%	75.00%
Netherlands	3	1.33	00:00:08	100.00%	66.67%
Canada	2	1.00	00:00:00	100.00%	100.00%
Italy	2	1.00	00:00:00	100.00%	100.00%
Brazil	2	1.00	00:00:00	100.00%	100.00%
Trinidad and Tobago	2	1.00	00:00:00	50.00%	100.00%

Poland	2	1.00	00:00:00	100.00%	100.00%
					1 - 10 of 19



Pages on this site were viewed a total of 1,990 times

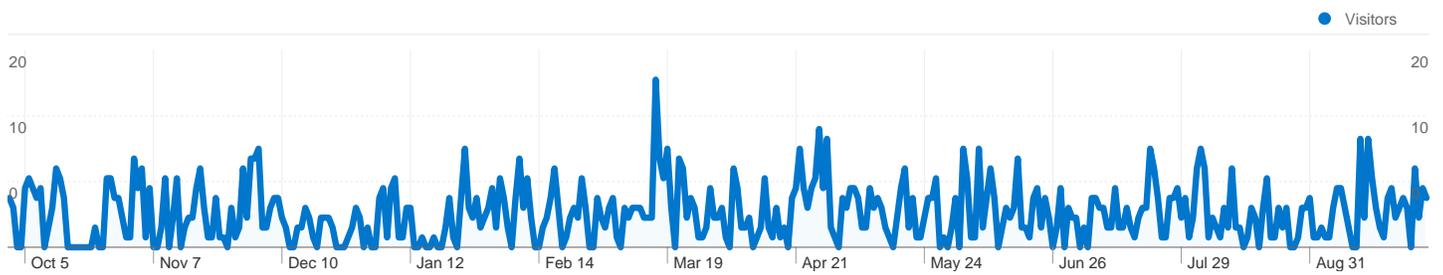
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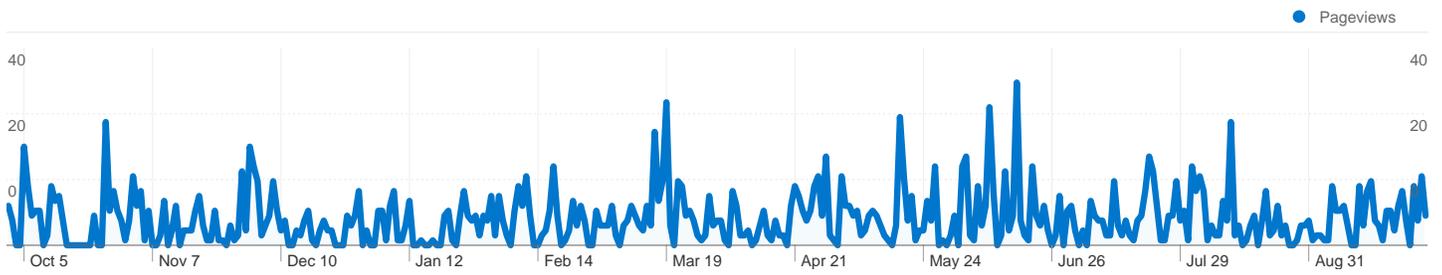
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