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School Name: Petaluma Accelerated Charter School at McKinley

Grade Level(s): 7th

Course: English/Science

Name of Watershed Classroom Unit/Project: Flush

Integrated Academic Disciplines: English/Science

Implementation Timeline: January: Read FLUSH

February 3: Friends of the Petaluma River Presentation in the classroom

February 14: River Visit #1

March 7: River Visit #2

April 11: River Visit #3

May 9: River Visit #4

May 23: Share-Out Day (essays and PSAs)

Key Learning Objectives: -Students will be able to draw connections between watershed in Key West in Monroe County, Florida (as read about in FLUSH) and the Petaluma Watershed.

-Students will be able to identify common contaminants in the Petaluma Watershed and describe their negative impact on the environment as a whole.

Provide a brief (50 word max.) description of this curriculum proposal, including the essential question.: Students will read the novel, FLUSH, learning about contamination in Monroe County, Florida and will then make various trips to the Petaluma Watershed to perform water sampling which will help them draw parallels between the two watersheds.

-What are the similarities and differences between the watershed in Key West in Monroe County, Florida and the Petaluma Watershed?

-How do specific contaminants enter and affect the Petaluma watershed and how can these contaminants be mitigated?

Provide a brief description (100 words max.) of how this coursework will integrate the core concepts of Geoliteracy: Interactions, Interconnections and Implications:

Student will learn how most everything they (and others) do has some type of impact on the environment. They will learn what it takes to make a successful and vibrant environment. They will discover how what happens in one area can and most likely will affect the area just downstream. And, they will find out how all these factors come together to decide the health and viability of any environment.

Describe the fieldwork activities involving the Petaluma River/Wetlands. Curriculum must include a minimum of three outdoor watershed educational experiences.: Students will participate in four trips to the Petaluma River to do water testing.

Describe any other hands-on learning activities: Four trips to the Petaluma River to conduct water testing and data collection.

Content Standards addressed: Mathematics

Alg 1: 25.0: Students use the properties of the number system to judge the validity of results, to justify each step of a procedure, and to prove or disprove statements.

Alg 1.0: Students identify and use the arithmetic properties of subsets of integers and rational, irrational, and real numbers, including closure properties for the four basic arithmetic operations where applicable.

Alg 1.1: Students use properties of numbers to demonstrate whether assertions are true or false.

Next Generation Science Standards

MS ESS3

MS ETS1-1,2,3

MS ESS2-1

MS PS1

MS LS2-1,4,5

English Language Arts

CCSS.ELA-Literacy.RL.7.1

Cite several pieces of textual evidence to support analysis of what the text says explicitly as well as inferences drawn from the text.

CCSS.ELA-Literacy.RI.7.8

Trace and evaluate the argument and specific claims in a text, assessing whether the reasoning is sound and the evidence is relevant and sufficient to support the claims.

CCSS.ELA-Literacy.W.7.1

Write arguments to support claims with clear reasons and relevant evidence.

CCSS.ELA-Literacy.W.7.2

Write informative/explanatory texts to examine a topic and convey ideas, concepts, and information through the selection, organization, and analysis of relevant content.

Reading Tasks: What primary documents and informational texts will be read/analyzed?: Students will be reading "Flush" by Carl Hiaasen toward the beginning of the project. This reading task will address the following standards:

CCSS.ELA-Literacy.RL.7.1

Cite several pieces of textual evidence to support analysis of what the text says explicitly as well as inferences drawn from the text.

CCSS.ELA-Literacy.RI.7.8

Trace and evaluate the argument and specific claims in a text, assessing whether the reasoning is sound and the evidence is relevant and sufficient to support the claims.

Writing Tasks: What kinds of writing tasks (Arguments and Drawing Evidence) will be required?: Students will be asked to write a compare and contrast essay using information found in Flush and the data they collected from the testing Petaluma River water as evidence. This writing task will address the following standards:

CCSS.ELA-Literacy.W.7.1

Write arguments to support claims with clear reasons and relevant evidence.

CCSS.ELA-Literacy.W.7.2

Write informative/explanatory texts to examine a topic and convey ideas, concepts, and information through the selection, organization, and analysis of relevant content.

Collaboration: How will students collaborate, communicate and organize together (Speaking and Listening/Discussion): Group Writing

Discuss Evidence

Water Sampling Groups

Students will work together to share thoughts and understanding to create different ways to communicate this information to their fellow students and the community at large. This could be PSA's, posters, or a podcast.

Integration of Media Sources and Skills: How will students use technology for research, communication, documentation and or presentation purposes?:

Students will use their iPads to research, communicate with one another, document their process, and create their final presentations.

CA Core Standards-based Assessments: How will students demonstrate their acquisition of new knowledge and skills?: Students will demonstrate their knowledge and skills in the following two projects:

-Essay comparing and contrasting the information found in Flush and the data they collected from the water testing of the Petaluma River.

-PSA, poster, or podcast focusing on a specific contaminant, where it comes from, and what can be done to negate its introduction in the the Petaluma River.

Presentation of Knowledge/Student Public Forum: Students present their knowledge and skills in the following two projects:

-Essay comparing and contrasting the information found in Flush and the data they collected from the water testing of the Petaluma River.

-PSA, poster, or podcast focusing on a specific contaminant, where it comes from, and what can be done to negate its introduction in the the Petaluma River.

Evaluation of Knowledge Mastery & Attitude Changes: : The pre and post assessments for students will be supplemented with the FOTPR assessments once they become available in the Spring.

Students will be asked to complete a journal write about their knowledge of watersheds, the Petaluma River, and their interest level in it.

Once the projects are complete and all water testing days are over, students will be again asked to reflect on their knowledge of watersheds, the Petaluma River, and how their attitudes have changed (or not) toward it.

Other Comments: Thank you for considering our late submission.
(Sent via [Watershed Classroom](#))