April 29, 2015

Office of the Governor

Governor Jerry Brown c/o State Capitol

Suite 1173 Sacramento, CA 95814

Dear Governor Brown,

As you may know, California is facing an ever growing water crisis as our cities see and feel the negative effects such as decreasing snowpack levels, rapid depletion of aquifers in the Central Valley, as well as Basin farmers facing devastating shortages and massive crop loss putting strain on our economy. As collaborators with the California Department of Water Resources, we will work with Susan H. Sims, executive Officer of the California Water Commission, in order to highlight the main issues that are proliferating the effects of the drought and develop a statistically backed plan to mitigate these effects. We will also detail measures to increase education on water conservation from the K-12 school system which will ensure our future water resources are being used responsibly. With the assistance of the Yosemite Valley’s meteorological station, operated by the CDWR, we have calculated that California will receive no form of viable precipitation for the next two years and will see areas of exceptional drought increasing up to 60% as shown in the trends by the U.S Drought Monitor [3]. Using 38 billion gallons each day is unsustainable and defies reason as by this method, our water supplies will only last for 1.34 years and will leave us 6 months without water or a plan. With this issue in mind, our research team has be able to develop a plan which will utilize strategically placed water cuts to certain areas based upon overall usage, location, and availability. Although this task may impact certain businesses and residential areas, there are safeguards in place to ensure a successful resolution to the current water crisis without having any damaging effects.

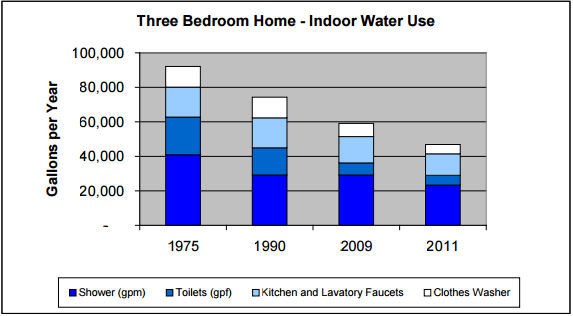
**Background**

Water is the most essential resource which California needs for continued development and to support its current functions in terms of lifestyle, recreation, and agricultural production. California, being the agricultural hub of the nation, depends heavily on water for producing over 200 different types of crops of which are in high demand across the nation and internationally [2]. Although relying on agriculture for a large portion of our economy, we leave ourselves vulnerable to increased dependence on water for our economy and can leave profitable industries economically unsustainable when we reach low levels of water reserve. With the limited rainfall throughout the state of California, it becomes difficult to budget our resources and reallocate water without having any negative effects on both residents and the industry. Many areas which been adversely affected by this demoralizing drought are agriculture, residential, industrial and infrastructure. Although this drought cannot be prevented completely, it can surely be mitigated to prevent greater damage to the state and its resources. With a well-developed plan, the drought can be reduced in the short and also long term. The purpose for the plan is to help those in need and to reduce the water usage as well as provide lasting effects to educate California on the necessity of water conservation efforts.

**Short Term Objectives:**

**Urban and Residential:**

The lowest percentage of California’s water used yearly is in the urban and residential areas of water use, unlike agricultural and environmental usage, which use around 40-50% each according to the Public Policy Institute of California [6].  Although urban usage only ever reaches around 10% of the total water used in all of California, at 181 gallons per person per day according to the USGS [7], this roughly translates to 5.8 billion gallons of water used per year. The average rate of residential water use in California has grown staggeringly within the past couple of years as it has increased from a little over 360 gallons per day in 2011 [7],  to 181 gallons per day per person as of today. With the average household size being 5 individuals, this leads to an estimated 905 gallons per day, residents are using approximately 2.5 times the amount of water than compared to only two years ago. This amount of water use strains our resources and may become unsustainable unless there are limits placed on how much is available for use and when it can be accessed. In order to reach a sustainable rate of usage, we must cut down overall water usage from 5.8 billion gallons per year to only 3.3 billion gallons per year.



**Figure. 1**: *Indoor Water Use*

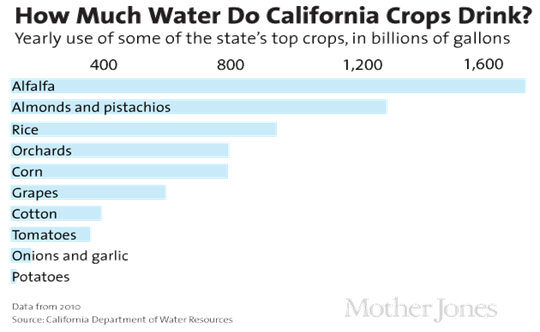
Data showing the total gallons per year continually decreasing for indoor water usage of        showerheads, toilets, faucets, and clothes washers. Sample includes data collected from 1975 to 2011.

Source: CONSOL California, Water Use in the California Residential Home

Opponents will often raise concerns that this method simply relies on cutting crucial resources from dependent citizens and does not do enough to focus on the problem of low water efficiency, but this is in fact, a misconception. Indoor water use encompasses faucets, washing machines, and toilets, use far less water than that of outdoor usage for lawns/landscaping as outdoor water usage and can encompasses as much as 80% of residential water usage. Many the cuts proposed will affect outdoor water usage more than indoor and have been analyzed for any social and economic impacts it may have. In order to save over 562,700,000 gallons of water, we will provide incentives for consumers to switch to more efficient fixtures. Generally, showerheads, toilets, and faucets are not replaced often and can last for many years meaning that many people may still be using inefficient fixtures such as 5 gpm toilets, 5 gym showerheads, and 8.5 g/cu clothes washers (Water Use in California Residential Home). Switching to 6 gal/cu clothes washer, 1.8 gpm faucets, 1.28 gpf toilets, and 2 gpm showerheads with the average shower ranging from 10-15 minutes and faucet use at 5 minutes max per day as well as 2 toilet flushes per day, we can save approximately 562,700,000 gallons of water per day in usage.. This conservation method is proven as shown in Figure 1. As we can see the overall water usage per home decrease from over 90,000 gallons per year in 1975 to under 45,000 gallons per year in 2011. We can attribute this success to the U.S. Energy Policy Act enacted in 1992 (EPAct 1992) as this comprehensive legislation has been proven to set minimum efficiency standards for all toilets, showers, urinals and faucets manufactured in the United States after 1994.

In terms of outdoor water use, lawns and landscaping are responsible for using over. According to the U.S census, there are approximately 13,790,495 homes within California as of 2013. According to data from the University of California, each 500 square-foot lawn uses approximately 18,000 gallons per year totaling 648,000,000 gallons per day used on lawns. A 75% reduction of lawn watering alone would lead to savings of over 486,300,000 gallons per day. This would face controversy as many residents in California view their lawns as a display of their success and take pride in their home and its status. The argument presented that they have worked hard for their money and deserve to spend it with their own discretion does not hold with respect to the California’s diminishing water supply and must yield to the greater cause, conservation of resources. In terms of implementation, we shall develop and establish a committee on rules which delegates penalties for city governments to enact if the lawns are still watered on non-watering days. The amount of non-watering days will be variable and correlate directly with the amount of water available within the certain region, population size, and also based upon necessity.

|  |
| --- |
|  |



**Figure 2.** *Agriculture Water Use*

*Source: Mother Jones, California Department of Water Resources*

Source: California Department of Water Resources (2010)

**Agriculture:**

In the state of California, Agriculture plays a significant role when it comes to producing crops.  California can be known as the powerhouse of agriculture throughout the United States. The state of California produces “About 73% of the state's agricultural revenues which are derived from crops…” (1). with this in mind, agriculture is truly important to the state of California as it plays an important role with water usage. Two of the tops crops that are produced in California are almonds and alfalfa. Almonds are not only important to California but are also essential for other parts of the world. The state of California is known to produce about eighty percent of the world’s almonds (Lurie). Although almonds are critical to California and other parts of the world, they do use a remarkable amount of water. The usage of water to produce almonds have skyrocketed over the past years due to the demand for almonds increasing. According to an article by Julia Lurie, it takes almost one gallon to produce one unit and is equivalent to flushing a toilet one time (Lurie). This is a huge drought causing factor that is detrimental to water conservation in California because the usage of water eventually accumulates over time. Over time, the production of almonds has increased, which has led to more usage of water. According to Figure 2 above, in 2010, the water usage to produce almonds and pistachios in a year was about 1.3 billion gallons of water.

**Figure 3. The pie chart displays the amount of residential water used for both sections, indoor water usage and outdoor water usage. 80% of the 5.8 billion gallons of yearly residential water is used for outdoor uses such as lawn watering while only 20 percent remains for indoor uses.**

**Source: Majok Ring**



**Figure 4. This diagram visualizes the water usage per year for wheat, almonds, tomatoes, and potatoes. Maximum water usage is 1.5 trillion gallons for both wheat and almonds per year while tomatoes and potatoes both use 500 billion gallons of water each year.**

**Source: Eddie Estrada**

Although almonds use a significant amount of water yearly, throughout California there is one crop that uses more water than almonds; alfalfa. Alfalfa is not an essential product for humans but rather is for animals such as cattle. With this in mind, we have to make a choice between feeding our cattle an abundance of alfalfa and saving our water resources Alfalfa hay is typically used to feed factory-cattle, such as the dairy cattle which runs the profitable California dairy industry. According to figure 1 above, as of 2010, the water usage to produce alfalfa yearly was more than 1.6 billion gallons of water.

Most people don’t think or realize the draining effect that alfalfa has on California’s resources. In recent years, the exporting of alfalfa to Asia has dramatically increased as the main purpose of exporting these goods is solely for the goal of profit in the or some kind of monetary compensation. Although California might receive a higher profit by exporting alfalfa, California is still affected negatively by the significant amount of water being used to produce such a high maintenance crop. New York Times columnist James McWillians does an excellent job explaining the downside of exporting alfalfa. One of the quotes which truly helped to develop his thoughts was when he stated “Alfalfa growers are now exporting some 100 billion gallons of water a year from this drought-ridden region to the other side of the world in the form of alfalfa”(McWillians).

Agriculture for years has been draining California’s resources not through necessity, but through inefficiencies and waste. Specifically, we are pouring billions of gallons into the agriculture industry without taking into account how much they actually need as we face new issues due to overwatering. With our plan, we will implement incentives to boost our water efficiency by working with farmers to establish irrigation scheduling as a subsidized farming practice. With irrigation scheduling, we will have accurate data on how much water each farm will actually need for proper development and production and uses moisture content and soil tension in order to establish watering needs (Colorado State University). Switching water intensive crops such as cotton (170,000 acres, 166 billion gallons per year), almonds (3.5 billion gallons per year) to irrigation scheduling methods can save up to 7.5 billion gallons of water per day. We have approximately 170,000 acres of cotton being produced per year and at that we calculate 500,000 acre-feet used to produce this cotton [14]. Using this much water will starve California of its water resources and benefits no one at this rate. We will be able to provide subsidies to each individual farm who checks in with our established farm affairs committee. This committee will be chaired by irrigation specialists and researchers who will spend time with farmers and work with them to analyze their crops and soil fertility in order to determine how much water they need at any given time. Those who cooperate and willingly work with this committee will have more leeway in terms of petitioning for more subsidized farmland or even gain assistance with legal fees if they were to be sued for patent infringement in the cases of many farmers who have had patented seeds from other farms blow into their fields and grow, unintentionally violating a patent. These protections and subsidies serve as powerful incentives to help reduce the resource burden that agriculture can create.

**Infrastructure**

A major source of water inefficiency in California lies in our pipeline system for transporting water to urban and residential locations. Countless leaks have occurred over the course of these pipes’ lifespan. Mike Brown, from the East Bay Municipal Utility District in California, or EBMUD for short, states in an article from the Mercury News that, “‘Sometimes you hear a loud hissing. Or something deep, the sound of a wind,’ … His team finds 800 to 1,000 leaks a year in a 4,200-mile-long maze of pipes, some of which were installed in the late 1800s, when cattle were still being herded to Oakland's rail yards and electric streetcars clanked through Berkeley” (Krieger). We cannot expect infrastructure built more than a century ago to be effective in today’s environment of heavy urban water usage in addition to massive industrial requirements. In addition to the vast amount of time that has eaten away at our pipe system in California, as a state we have suffered a number of large magnitude earthquakes. Since 1900, there have been five earthquakes measuring in at over a 6.5 on the Richter scale. In 1906, there was the famous San Francisco earthquake which measured in as a 7.8 magnitude earthquake. During 1952, a 7.5 magnitude earthquake happened 23 miles south of Bakersfield. In 1971, a 6.6 earthquake occurred, in 1989 a 7.1, and in 1994 a 6.7 (centurynational.com). Without taking into account the numerous other earthquakes that happen in California, it shouldn’t come as a surprise to anyone that our pipelines have been damaged. Within the Bay Area alone, “...the region's water providers have been losing about 23 billion gallons a year, a new analysis of state records reveals” (Krieger). Imagine how much water has been lost within just the last decade. 23 billion gallons of water lost in a single year due to a lack of concern for our pipes is 23 billion gallons too many at any point in time. Just last year, the catastrophic water main burst at UCLA in which 20 million gallons of water submerged the lower half of a parking structure highlights just how poorly we have been taking care of our pipeline system. As bad as that event was for our state’s water conservation, it pales in comparison with the figure reported by the Los Angeles Daily News in which “California’s water distribution systems lose up to 228 billion gallons annually, the state estimates — more than enough to supply the entire city of Los Angeles for a year” (Reicher). Also stated in the article from the Los Angeles Daily News is the monetary loss caused by inefficiency in water transportation, coming in at $32 million a year for Los Angeles alone (Reicher). We must also press forward and see another reason besides monetary and resource conservation as motivations to fix our pipeline system. “The catastrophic water-main break last month that deluged the UCLA campus with 20 million gallons of water, destroying 300 cars and creating a 25-by-30-foot oval sinkhole about 7 feet deep” (Krieger) is another glaring reason why we cannot continue to ignore our pipeline system. If allowed to continue leaking, our pipes will not only bleed us dry both in terms of water and money, it will quite likely pull the ground from underneath our feet in the form of sinkholes like the one created by the water main break at UCLA. If nothing else, by fixing the pipeline system as a state we would conserve the 228 billion gallons of water each year during a time when water is so precious and vital to our survival and way of life.

**Long Term Objectives:**

Although our proposal tackles all points of the issues of water conservation within California, it is imperative that we continue this course of increased criticism of our overuse of resources and continue to promote these methods long past the two year mark. As we all know, climate continues to rapidly change due to anthropogenic causes due to our carbon emissions. Since global warming continues to occur at an increasing pace, we need to cement these values of conservation into our citizens so we may prosper when granted few resources and more limitations. One way to do this is to increase the budget to promote conservation of resources within K-12 schools as these are the individuals most at risk as they develop may develop lifelong habits at that age and will be there to experience the effects of a harsher drought in the future. We will also continue to fund public service announcements which will have strong details on our current water resources, where they are being allocated, and how we can each do our part to lessen the burden.

Long term solutions are vital to the state of California because long term goals provides direction and also allows the future to be in a better position. Although short term solutions are important, their needs to be a plan for the future. One certain plan which can truly help the agriculture industry, is to limit the almond production in the state of California. In order to limit the production of almond, farmers will either be limited the production of almonds or can produce a different type of crop which uses less amount of water, such as vegetables. Another outstanding factor that affects California’s water usage, is the exporting of alfalfa to Asia. Although farmers make a larger profit from exporting of alfalfa, this method uses a significant amount of water. The second method is to reduce or limit the exporting of alfalfa to Asia. With this method, California will be conserving thousands of gallons of water due limited alfalfa being exported.

**References (or Works Cited)**

1. "California Economy." Economy of California including California Agriculture and Manufacturing from NETSTATE.COM. N.p., n.d. Web. 28 Apr. 2015.
2. "California Water Use." *California Water Use*. N.p., n.d. Web. 29 Apr. 2015.
3. "Drought: Irrigation Tips." *- The California Garden Web*. N.p., n.d. Web. 30 Apr. 2015."
4. Drought-Stricken California's Wealthy Pay Up to Keep Lawns Lush."*Bloomberg.com*. Bloomberg, n.d. Web. 29 Apr. 2015.
5. "Irrigation Scheduling." *Irrigation Scheduling*. Colorado State University Extension, n.d. Web. 30 Apr. 2015.
6. *IRWD*. Irvine Ranch Water District, n.d. Web.
7. Krieger, Lisa M. "California Drought: Bay Area Loses Billions of Gallons to Leaky Pipes." *- San Jose Mercury News*. San Jose Mercury News, 16 Aug. 2014. Web. 29 Apr. 2015. <<http://www.mercurynews.com/drought/ci_26350962/california-drought-bay-area-loses-billions-gallons-leaky?source=infinite>>.
8. Lurie, Julia. "California Almonds Suck as Much Water Annually as Los Angeles Uses in Three Years." *Mother Jones*. N.p., 12 Jan. 2015. Web. 28 Apr. 2015
9. "MAJOR CALIFORNIA EARTHQUAKES." *MAJOR CALIFORNIA EARTHQUAKES*. Century-National, n.d. Web. 29 Apr. 2015. <<http://www.centurynational.com/pgs/earthquake/earth3.aspx>>
10. Mcwilliams, James. "Meat Makes the Planet Thirsty." *The New York Times*. The New York Times, 07 Mar. 2014. Web. 28 Apr. 2015.
11. Reicher, Mike. "California Water Agencies Lose Millions of Gallons Underground." *California Water Agencies Lose Millions of Gallons Underground*. Los Angeles Daily News, 21 Oct. 2014. Web. 29 Apr. 2015. <<http://www.dailynews.com/general-news/20141021/california-water-agencies-lose-millions-of-gallons-underground>>.
12. "U.S. Drought Monitor." *United States Drought Monitor Home State Drought Monitor*. National Drought Mitigation Center, 21 Apr. 2015. Web. 28 Apr. 2015. <<http://droughtmonitor.unl.edu/Home/StateDroughtMonitor.aspx?CA>>.
13. "Water Sense." *EPA*. Environmental Protection Agency, n.d. Web. 28 Apr. 2015.
14. "Water Use in California (PPIC Publication)." *Water Use in California (PPIC Publication)*.N.p., n.d. Web. 29 Apr. 2015.

**CORE 1 QUANTITATIVE #2 TEAM PLAN**

***Before beginning the assignment, each group must collaboratively complete this form and share a copy with each group member and your instructor.***

**Team Members:**

(1)Karanveer\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

(2)Kenny \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

(3)Majok \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

(4) Eddy\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Team Procedures**

**• Days, times, and places for regular team meetings:**

Tuesdays and Thursdays immediately after class, Location Unknown

**• Method of communication** (e.g., e-mail, phone, wiki, CROPS Discussion Board, PB Works page, face-to-face, before/after class) in order to inform each other of team meetings, collected information, updates, reminders, drafting, problems:

Via E-mail

**• Methods for setting and following meeting agendas:**

(1) Who will set each agenda? When? Who will be responsible for asserting it during team meetings?

Majok and Kenny will set the agenda for the meetings and direction.

(2) What will be done to keep the team on track, in and outside of meetings?

The equal distribution of work and responsibilities to ensure everyone is on track.

The whole team will keep in touch through email and texts.

(3) Strategies to ensure cooperation, collaboration, collective input, and equal distribution of tasks:

Trust falls, team-building exercises, duck duck goose.

**Proposed Roles & Responsibilities**

Carefully examine the assignment and determine ways to “divide and conquer” the task, in terms of specific categories of information and analysis for which the assignment asks.

**Team Member Research/Reporting Areas**

1.Majok:  Urban and Residential research will be done by Majok.

2.Eddy: Agriculture research will be done by Eddy. After the research is done, Eddy will then be able to accomplish his part of the assignment.

3.Kenny: Infrastructure research will be done by Kenny.

4.Karanveer: Primarily revision and editing where needed to make sure that the prompt is being followed in all areas. Also performed the calculations necessary to complete the research.

**Proposed Report Composition**

Who will be responsible for drafting specific parts of the report? And/or, will the team draft all parts of it together?

The team will draft all the parts together in order to complete the assignment.

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

1. *I participated in formulating the standards, roles, and procedures as stated in this contract.*
2. *I understand that I am obligated to abide by these terms and conditions.*
3. *I understand that if I do not abide by these terms and conditions, my assignment grade will be negatively affected.*
4. *I understand that I am obliged to report any breach in this contract by a fellow team member to my instructor.*

**Signed:**

**1) Karanveer Bains\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_date\_4/29/15\_\_\_\_\_\_\_\_\_\_\_\_\_**

**2) Majok Ring \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_date\_4/29/15\_\_\_\_\_\_\_\_\_\_\_\_\_**

**3) Eddie Estrada\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_date\_4/19/2015\_\_\_\_\_\_\_\_\_**

**4) Kenny Kwong\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_date\_4/29/15\_\_\_\_\_\_\_\_\_\_\_\_\_**

**CORE 1 QUANTITATIVE #2 ACTIVITY LOG**

***In working on the assignment, each team member must keep detailed records of the group’s communications, tasks (individual and collaborative), and meetings, and submit his/her copy of this ACTIVITY LOG with the completed assignment. Attach additional sheets as necessary.***

|  |  |  |
| --- | --- | --- |
| Time/Date | Team Member(s) | List & Description of Task(s) |
| **4/14**  **Class** | **Kenny**  **Karanveer**  **Majok**  **Eddie** | **Began Quant #2 Worksheet** |
| **4/16**  **Class** | **Kenny**  **Karanveer**  **Majok**  **Eddie** | **Continued Quant #2 Worksheet** |
| **9:00-10:00**  **PM**  **4/19** | **Kenny** | **Research & creation of google doc material** |
| **9:00-11:00**  **PM**  **4/20** | **Kenny** | **Light research (was at practice so it wasn’t continuous)** |
| **5:00-6:00**  **PM**  **4/20** | **Eddie Estrada** | **Research for the power point presentation.**  **Began to work on my part of the Essay.** |
| **12-1:00pm**  **PM**  **4/21** | **Kenny**  **Karanveer**  **Majok**  **Eddie** | **Met up after class and conducted research for possible plans.**  **Brainstormed pros and cons to these plans.** |
| **12-1:00**  **PM**  **4/23** | **Kenny**  **Karanveer**  **Majok**  **Eddie** | **Met up after class and finished the remainder of research.**  **Roles were assigned and typing began.** |
| **12-1:00**  **PM**  **4/27** | **Kenny**  **Karanveer**  **Majok**  **Eddie** | **We met once more to go over what had been completed.**  **Collaboratively typed the essay until the meeting ended.** |
| **Evening**  **4/27** | **Kenny** | **Research/Creation of Pipes Stuff** |
| **Evening**  **4/28** | **Kenny** | **Research** |
| **6:00-11:30**  **PM**  **4/29** | **Kenny** | **Writing/Revising Infrastructure section of proposal** |
|  |  |  |

**CORE 1 QUANTITATIVE #2 GROUP AND SELF ASSESSMENT**

***When your group finishes the assignment, each group member must complete this form and submit it to his/her instructor.***

**NAME:**

**• Roles & Responsibilities**

Which group members did which things—and how much of them—for the assignment?

**Team Member Research/Writing/%**

1. Majok Ring    45

2. Eddie 25

1. Kenny 20
2. Karanveer 10

**• Process:  Describe your experience working collaboratively.**

1. What worked well?

We were able to come together as a group and work through google docs as it was easier to communicate and work together simultaneously. This way, we didn’t have to spend too much time deciding who did what and when it would happen. If some work was still left to be done, anyone could pick up on it and make any final edits and contribute well.

1. What went badly?

Some members did not respond well and had the others do more work than necessary and waited later on to do some of their assignments.

P***lease complete the following assessment for yourself and for each group member***

**•** Group member being rated:  SELF

Rate each of the following on a scale from 1-5 (with 1 being low and 5 being high):

1. Contributed their equal share to group projects \_\_\_\_\_5\_\_\_
2. Adhered to the agreements outlined in the group contract \_\_\_\_5\_\_\_\_
3. Contributed to my development as a writer/college student \_\_\_\_\_5\_\_\_
4. Offered inventive/important insights \_\_\_\_\_5\_\_\_
5. Contributed to researching the project \_\_\_5\_\_\_\_\_
6. Contributed to writing the project \_\_5\_\_\_\_\_\_
7. Was supportive of group activity \_\_\_\_5\_\_\_\_

**TOTAL       35 /35**

Comments:

**--------------------------------------------------------------------------------------------------------------------**

**•** Group member being rated:   Eddie

Rate each of the following on a scale from 1-5 (with 1 being low and 5 being high):

1. Contributed their equal share to group projects \_\_\_5\_\_\_\_\_
2. Adhered to the agreements outlined in the group contract \_\_5\_\_\_\_\_\_
3. Contributed to my development as a writer/college student \_\_\_5\_\_\_\_\_
4. Offered inventive/important insights \_\_\_\_\_5\_\_\_
5. Contributed to researching the project \_\_\_\_5\_\_\_\_
6. Contributed to writing the project \_\_\_5\_\_\_\_\_
7. Was supportive of group activity \_\_\_5\_\_\_\_\_

**TOTAL       35 /35**

Comments:

**--------------------------------------------------------------------------------------------------------------------**

**•** Group member being rated:   Kenny

Rate each of the following on a scale from 1-5 (with 1 being low and 5 being high):

1. Contributed their equal share to group projects \_\_\_3\_\_\_\_\_
2. Adhered to the agreements outlined in the group contract \_\_3\_\_\_\_\_\_
3. Contributed to my development as a writer/college student \_\_\_1\_\_\_\_\_
4. Offered inventive/important insights \_\_\_\_3\_\_\_\_
5. Contributed to researching the project \_\_\_\_\_\_3\_\_
6. Contributed to writing the project \_\_2\_\_\_\_\_\_
7. Was supportive of group activity \_\_\_3.5\_\_\_\_\_

**TOTAL      14.5 /35**

Comments:

**•** Group member being rated:   Karanveer

Rate each of the following on a scale from 1-5 (with 1 being low and 5 being high):

1. Contributed their equal share to group projects \_\_1\_\_\_\_\_\_
2. Adhered to the agreements outlined in the group contract \_\_\_4\_\_\_\_\_
3. Contributed to my development as a writer/college student \_\_\_3\_\_\_\_\_
4. Offered inventive/important insights \_\_\_3\_\_\_\_\_
5. Contributed to researching the project \_\_\_\_\_\_1\_\_
6. Contributed to writing the project \_\_\_1\_\_\_\_\_
7. Was supportive of group activity \_\_5\_\_\_\_\_\_

**TOTAL        12/35**

Comments:

Overall, we did complete all tasks of the assignment but could have spent more time making sure that our own assignments were complete. Working in this group project taught me that you have to make progress as a team and there might be obstacles but it is easier to simply redistribute the workload in order to create a more efficient team. These scores are not reflective on their level of interest, but were based with on the level of work that I myself am used to completing. They are nice students who we got along with well and had their intentions set on simply completing this project while my goals may have been higher which led to miscommunication.