## Team Project 1

This image was chosen for the second group project although it was done alone. The purpose of the image was to display an interesting flow in a natural setting. Interesting flows can be found all around us in our daily lives, and can sometimes be more intriguing than a flow created in a laboratory. This image shows the interesting dynamics created by the effects of melting snow and ice.

The set up for this image involved a bucket of partially frozen, cold water underneath a stream of warmer melt water. The stream was falling from the roof of my house which was approximately 9' above the bucket. The picture was captured looking down into the bucket which was square with sides around 1' and a depth of 1.5'. The left edge of the image shows what is left of the ice layer in the bucket which existed prior to melting. The warm stream falling from the roof fell in the same general area creating a hole in the ice. This allowed the water from the roof to land in the newly revealed water in the bucket. In the center of the image, the hole represents where the stream was impacting the bucket water. The focus of the flow is the fog that was disrupted by the water beneath it. The fog was very low and was moving due to the ripples of the water. While the speed of the smoke is difficult to estimate, it is clear that the flow is steady. The fog is also known as evaporation fog, which occurs when cold, dry air comes in contact with warm water relative to the air¹. The melt water was heated above by the sun and below by the heat of the dark roof which transferred heat to the water by conduction.

There are other elements in the picture that still might intrigue the viewer, such as the brown coloring. The colors that are clearly not water or ice represent objects at the bottom of the bucket. Near the center of the image a brown glass bottle is resting at the bottom of the bucket and other areas indicate dirt at the bottom of the bucket. The lighting was natural with the winter sun starting to become dimmer at the time it was taken, 4:15 pm.

The scale of the image is approximately 3"x3" and was taken 4' above the bucket. The camera used was a Canon EOS Digital Rebel. The camera settings used a shutter speed of 1/30, an ISO number of 400, a focal length of 90mm, and an aperture of F/5.6. The original image, which can be seen on the following page, was a dreary picture lacking contrast. I chose to tweak the color curves on Adobe Photoshop by increasing the amount of white colors twice as much as I increased the black colors. This made the water easier to distinguish from the smoke and added some pleasing dark blue to the water color. The final image was cropped with the size 2620x2048 pixels.

The reason I chose this image was because it was an unplanned instance in which I admired a flow. I believe that it is easier to find a flow enjoyable when you have a laboratory or experiment set up for the purpose of capturing an image. I think this is so because the photographer has the intent of capturing an image, where as a flow in the natural world is more of a random occurrence or by chance and the camera is introduced after the seeing the flow rather than prior to it. I believe this is an interesting way to perceive flow as art and hope future photographers can find pleasing flows to capture in the natural world as well.

