Landing Page

When first loading up the app, users are brought to a main landing page. On this page, the name of the app is shown, “Floodwalk Flood Mitigation AR Experience,” and users are given an option to read and agree to the Terms and Conditions of the app. The background image on the screen is a blurry view of a park and there are three wavy, white lines undulating behind the name of the app. Once the user has checked the “agree” box, they can then press the “Begin” button and enter the experience.

Quickstart Instructions

After selecting the “Begin” button, the user is brought to a screen with three sets of instructions to scroll through by sliding right. Each instruction screen includes a white section with blue and black text to the left and a dark blue section showing a small graphic in white. These instructions are:

Quickstart On-Site – Using the map, navigate to different experiences throughout your current location. The graphic is a stick figure walking through a small maze.

Quickstart Off-Site – No matter where you are, you can experience Floodwalk. Using this app, you can explore various experiences from each location without needing to be there. The graphic is two hands holding up a phone inside of a house.

Quickstart Floodwalk Locations – Scroll through the list of locations and select one to learn more. The graphic is an image of the United States with white dots denoting other locations the app has experiences for.

After reading through each set of instructions, the user will press the “Got it!” button to proceed to the location selection screen.

Locations

On this screen the user can scroll through a list of locations and select either the location they are currently in to enjoy on-site experiences or a location they are not currently in to enjoy off-site experiences. Locations are shown here as a circle with white text overlay.

Currently only Confluence Park in Denver, Colorado, is available. Swiping to the right reveals a placeholder with the words “Coming soon!”

The user must tap on the location to go to the next experience. If the user is standing near the selected location, they will be prompted with a yes or no question “Are you currently at Confluence Park?” Selecting yes will bring them to the on-site app experiences, selecting no will bring them to the off-site app experiences. If the user is not standing in the selected location, they will automatically be brought to the off-site app experiences.

Markers On-Site

Marker One On-Site – Historic Floods

Upon reaching Marker One, the user will see through their phone a live version of Confluence Park. They are standing in the approximate middle of the park looking out over the confluence of the South Platte River and Cherry Creek from an elevated position approximately 20 feet above the river. To their left is

Shoemaker Plaza, directly in front of them is a set of manmade rapids for local kayakers to enjoy, and to their right is the Speer Boulevard Platte River Bridge. A voiceover, either in English or Spanish, should begin playing shortly after starting this experience that teaches the user about historic flood risk on the river.

On screen, there are four buttons to the right and a slider moving up and down on the left. The top right button is a camera that takes a screenshot of what the user is looking at and allows them to share that image on social media. The next button down presents a text version of the voiceover. The button below that will turn the sound on or off, and the final button opens a help screen that teaches the user how to experience this marker. The slider on the left has four options: 13.1 feet, which represents the recent flood of 2015; 18.3 feet, which represents a 100-year flood event; 20 feet, which represents the historic flood of 1864; and 28 feet, which represents the catastrophic flood of 1965. Sliding this up and down will raise and lower water levels, giving the user an approximate idea on what these floods would look like in Confluence Park if they were to occur today.

13.1 feet shows the user an image close to the everyday water level. The park is almost fully functional with water overtopping the steps of Shoemaker Plaza and washing up near the pedestrian trail on the other side of the river from where the app use is standing.

18.3 feet represents an eventful flood event. The water stretches completely over Shoemaker plaza to the grassy areas on the opposite side of the river. The park is nearly completely underwater, with water coming up as high as just a few feet below where the app user is standing.

20 feet takes the flood event a bit higher and now water is just below the users' feet as they look out over a flooded park. The park is underwater from edge to edge and all park amenities are inaccessible.

28 feet represents the worst-case flood event for Confluence Park. The user is now waist deep in floodwaters with the waters stretching in all directions as far as the user can see. No part of the park is accessible at this flood level and the water comes up to just below the vehicle bridges to the north and south sides of the park.

When finished with this experience, the user must tap the "Map" button along the bottom of the screen, which will take them back to the main map view of the park.

Marker Two On-Site – Flood of 1965

Upon reaching Marker Two, the user will see through their phone a live version of Confluence Park. They are standing in the southeast corner of the park looking out over the South Platte River towards Shoemaker Plaza. To their right is the 15th Street Bridge, to their left is Cherry Creek, and behind them are stairs leading up and out of the park. A voiceover, either in English or Spanish, should begin playing shortly after starting this experience that teaches the user about the historic 1965 flood.

On screen there are three buttons on the right and a "back" button in the top left. The top right bottom will provide a text version of the narrative, the second button on the right will turn sound on and off, and the final button at the bottom right of the screen will open a help page and provide instructions on how to use this marker. Clicking the help page will display a graphic telling the user to point their phone at the ground to orient the augmented reality and then to look around and experience the content.

At this marker the user will see the park as if they were back in 1965. To produce this illusion the image on their phone has been filtered to show a sepia tinted version of the park. All around them is trash and debris, all washed up in the park because of the catastrophic flood. The debris around the user is meant to represent pieces of concrete, rebar, and other random pieces of material that would have been wrenched from their normal locations by the force of the floodwaters.

When finished with this experience, the user must tap the "Map" button along the bottom of the screen, which will take them back to the main map view of the park.

Marker Three On-Site – Rebirth of Confluence Park

Upon reaching Marker One, the user will see through their phone a live version of Confluence Park. They are standing in the approximate middle of the park at the "Birth place of Denver" looking out over the confluence of the South Platte River and Cherry Creek from an elevated position approximately 15 feet above the river. To their left is Shoemaker Plaza the manmade rapids and the South Platte River and to their right is Cherry Creek. A voiceover, either in English or Spanish, should begin playing shortly after starting this experience that teaches the user about how Confluence Park has been reborn into this beacon of livability.

On screen there are three buttons on the right and a "Map" button along the bottom. The top right bottom will provide a text version of the narrative, the second button on the right will turn sound on and off, and the final button at the bottom right of the screen will open a help page and provide instructions on how to use this marker. Clicking the help page will display a graphic telling the user to look around using their phone and tap on each green hotspot to learn more about the park.

To access the Marker Three content, the user must use their phone to look around in all directions. As the user pans their phone around the park, seven green bubbles will be visible as they hover over important locations in the park. Tapping on each one of these will bring the user to a new screen that provides information and images detailing the hotspot they just opened. The seven hotspots are:

Xeriscaping Techniques – Denoted by a flower icon, is located next to Shoemaker Plaza towards the north side of the park. Clicking this hotspot opens an image carousel displaying an initial cover page providing the name of the marker followed by four images. The first image is picture of the native plant life as planted near Shoemaker Plaza looking northwest. The image includes numerous yellow, green, and red shrubs, which are all designed to thrive in Colorado's dry environment with minimal maintenance requirements. The second image is of the same plant life a little further north of the first image. The third image is of the same planted area, this time looking towards the northeast. The final image is looking northwest towards Shoemaker Plaza and shows the same groupings of native plant life.

Rebuilt Trail System – Denoted by a wavy trail icon, is located on the south side of the South Platte River along the river itself. Clicking this hotspot opens an image carousel displaying an initial cover page providing the name of the marker followed by two images. The first image is taken from near ground level and is looking northwest over the waterside trail. In the image the user can clearly see the trail, the South Platte River directly in front of them, the Speer Street Bridge to the left, and Shoemaker Plaza to the right. The second image is taken from a higher vantage point and offers the same view of the park, now with the Speer Street bridge in the center and the trail running out of frame to the bottom right.

Increased Land Value – Denoted by a building icon, is located on the south side of the park hovering above the large new apartment complex that borders the park. Clicking this hotspot opens an image carousel displaying an initial cover page providing the name of the marker followed by two images. The first image shows a row of grey and white, four story tall apartment buildings that run along the northern border of the park. Many of these apartments have balconies that offer great views of the river and park and between the buildings, and the river is a stretch of land gently sloping downward towards the user and covered in native plant life. The second image shows the recently-built skyscraper that borders the southern edge of the park. In front of the building is a red sign noting that the user is currently in Confluence Park.

Return of Wildlife – Denoted by a fish icon, is located towards the middle of the South Platte River when looking south. Clicking this hotspot opens an image carousel displaying an initial cover page providing the name of the marker followed by seven images. The first image is of a green and white flowering plant species called the Ute Ladies'-tresses. The second image is of a grey mouse called the Preble's Meadow Jumping Mouse. The third image is of a pink and white flowering plant species called the Colorado Butterfly Plant. The fourth image is of a teal, gold, and burnt orange fish called the Iowa Darter. The fifth image is of a green and yellow frog with dark green circle patterns on its back called the Northern Leopard Frog. The sixth image is of a brown mammal in a green field called the North American River Otter. The seventh and final image is of a brown and white bird called the Western Yellow-Billed Cuckoo. All these images represent the native species that have returned to Confluence Park following the work done to revitalize the area.

Artwork Along Retaining Wall – Denoted by a paintbrush icon, is located across the river near the confluence of the South Platte River and Cherry Creek. Clicking this hotspot opens an image carousel displaying an initial cover page providing the name of the marker followed by 12 images. The first image is of a painting of a forest done in reds and oranges with a wild bird towards the middle. The second image is a detailed drawing of a buffalo with brown hair and a white head. The third image is a small cityscape done in black and white. The houses are close together with many windows visible of varying shapes and sizes. The fourth image is of a bird sitting on a branch. The leaves on the branch are colored blue, green, and pink, and the bird is mostly black with some orange and white coloration on its wings. The branch also has nine red berries attached to it. The background of the image is blue with an orange circle on the right side. The fifth image is a different angle of the same bird on a branch picture shown in image four. The sixth image is of a turtle standing on a grey rock. The turtle has its neck outstretched and is painted green and yellow. The seventh image is a close-up picture of the same turtle. This image is focusing only on its head and wide-eyed expression. The eighth image is a landscape of several jagged mountains with a circular pattern in the background. The mountains are painted in shades of blues and whites, with the circular pattern done in brown, orange, and white. The ninth image shows a dinosaur, likely a Stegosaurus, with green scales and brown and orange plates on its back. It is walking across a gray rock towards a tree with green leaves. The tenth image shows a pair of birds over wild background design. The bird in the center is very detailed with grey feathers and an orange and black bill, while the bird to its left is abstract and painted more to blend in with the background design. The background is a mix of shapes painted blue, red, orange, and black. The eleventh image is a close-up of a wild bird in an orange forest. The bird is looking towards the viewer, and its feathers are a mix of brown, blue, red, and orange. The twelfth and final image is of a face with its eyes closed, surrounded by detailed abstract patterns. The face is tan with large eyes and a small mouth and nose.

Continued Park Use During Minor Floods – Denoted by a steps icon, is located behind the user above the steps on Shoemaker Plaza. Clicking this hotspot opens an image carousel displaying an initial cover page providing the name of the marker followed by five images. The first image is a close-up of the steps on Shoemaker Plaza. Eight steps made of smooth concrete are visible, with each step designed to disappear under floodwaters and reemerge undamaged once the waters recede. The second image is of Shoemaker Plaza looking towards the northwest. The South Platte River takes up a majority of the bottom left of the image, and the Speer Street bridge is visible to the top left. The third image is another close-up of the concrete steps built for Shoemaker Plaza and some of the native plant life that has been xeriscaped into the area. The fourth image is another close-up picture showing the well-designed concrete steps leading from the pedestrian walkways above down to the water below. The fifth image shows Shoemaker Plaza during a very minor flood event. In this image the user can see the water level has risen enough to cover several of the lowest levels of steps and is rushing back toward the camera and out of frame. Just one level of steps separates the viewer from the water level, but the plaza itself is undamaged and will return to full functionality as soon as the water levels drop back to normal.

Artificial Whitewater Course – Denoted by an icon of three wavy lines, is located to the northeast of the user over the river. Clicking this hotspot opens an image carousel displaying an initial cover page providing the name of the marker followed by two images. The first image is taken from above the artificial whitewater course looking west down the South Platte River. Most of the park is in the frame, including Shoemaker Plaza to the left and the rebuilt trail system and artwork along the retaining wall to the right. The second image is taken from the water level looking east up the artificial whitewater course towards the Speer Street Bridge. Only the bridge and rapids are displayed from this view, and it is easy to make out the numerous dips and swirls of the whitewater course.

When finished with this experience, the user must tap the “Map” button along the bottom of the screen, which will take them back to the main map view of the park.

Marker Four On-Site – Past

Upon selecting Marker Four, the user will see through their phone a live version of Confluence Park from a vantage point in the northwest corner of Confluence Park. They are standing near a pedestrian footbridge that crosses over the South Platte River with the Speer Street Bridge to their left and the park to their right.

On screen, there are four buttons to the right. The top right button is a camera that takes a screenshot of what the user is looking at and allows them to share that image on social media. The next button down presents a text version of the voiceover. The button below that will turn the sound on or off, and the final button opens a help screen that teaches the user how to experience this marker. Tapping the “help” button brings the user to a screen detailing the functionality of each button and how to use the slider present throughout this marker’s experience to compare past and present imagery of the park.

Looking to their left, the user will see two green bubbles hovering over the park near the Speer Street Bridge. Looking to their right, the user will see another two bubbles hovering over Shoemaker Plaza. Clicking each of these hotspots will bring up an image with a slidable feature in the middle. Moving this slider to the right will reveal the full version of a historic photograph taken from the vantage point of the chosen hotspot. Moving the slider to the left will reveal a modern photo taken from the same vantage point that allows the user to see how the area has changed over the last forty years.

Starting with the makers to the left, the hotspot furthest from the user will display an image of the Denver Tramway Building. Sliding fully to the right will reveal a black and white version of the building with smokestacks sticking out from the roof and railroad tracks along the front of the building. Sliding to the left reveals the building as it is now, an REI flagship store with the railroad tracks replaced with pedestrian and bike pathways.

Tapping on the closest hotspot, the user sees a black and white image of the park from the southeast looking northwest. In it the Denver Tramway building is visible to the left, and old versions of the pedestrian walkway over the South Platte River and Shoemaker Plaza are visible. Sliding to the left reveals the modern park with the now-updated walkways and Shoemaker Plaza, the Denver Tramway building now housing REI, and the new, modern apartment buildings bordering the northern side of the park.

Looking towards the hotspots on the right, the hotspot furthest to the left offers a view from the northeast looking southwest. Sliding fully to the right reveals the old pedestrian walkways leading down to the river, as well as undeveloped land towards the center of the image. Sliding fully to the left reveals the more pedestrian-friendly and accessible pathways down to the water, the modern version of Shoemaker Plaza, the updated Speer Street Bridge, and amenities at Elitch Gardens rising in the background.

The final hotspot provides a view from over the South Platte River looking southwest. Sliding fully to the right reveals a black and white image of the old waterfront plaza. Sliding fully to the left reveals the updated Shoemaker Plaza, Speer Street Bridge, and artificial whitewater course.

When finished with this experience, the user must tap the “Map” button along the bottom of the screen, which will take them back to the main map view of the park.

Marker Five On-Site – Present

Tapping on Marker Five will bring the user to a zoomed-out map of the greater Denver region. The map is presented in shades of blue and white with the darkest blues representing roads and bodies of water and the lighter shades representing developed areas. Names of towns are shown in blue text and the visible region stretches from Chatfield Reservoir to the south up to Broomfield in the north and Idaho Springs to the west and Watkins in the east. There will be an instructional pop-up on screen telling the user to “Tap on each hotspot to learn more about current flood risk reduction projects in the Denver area”. After a few seconds this pop-up will fade away and the user will be able to start the experience.

On screen there are three buttons on the right and a “back” button in the top left. The top right bottom will provide a text version of the narrative, the second button on the right will turn sound on and off, and the final button at the bottom right of the screen will open a help page and provide instructions on how to use this marker. Clicking the help page will display a graphic telling the user to tap on each hotspot to learn more about the completed mitigation action. In addition to these, just above the help button are plus and minus symbols. Tapping the plus symbol will zoom in the map and allow the user to focus on a smaller area. Tapping the minus symbol will zoom the user back out. The word “map” is visible along the bottom of the screen, and tapping this will return the user back to the main map of the park.

Across the map there are ten green bubbles or hotspots representing mitigation work that has already been completed. Tapping on each one of these will bring the user to a new screen that provides information and images detailing the hotspot they just opened. The ten hotspots are:

Chatfield Reservoir – Located towards the bottom center of the screen north of Roxborough Park and west of Highlands Ranch on the map. Clicking this hotspot opens an image carousel displaying an initial cover page providing the name of the marker followed by seven images. There are two buttons on the left side of the carousel; the top, denoted by an "I," will bring the user to a text box providing more information on the mitigation work being highlighted by the hotspot. The button below that will mute and unmute the sound. An X visible at the top right of the screen will close the image carousel and take the user back to the main map. Image one shows the earthen dam and control structure, the frozen reservoir, and two people ice fishing on the surface of the lake. Image two is taken from the top of the earthen dam looking out over the frozen lake. Between the user and the reservoir are some picnic tables and a path leading towards the reservoir. Image three is taken from the top of the earthen dam looking towards the control tower. There are some native yellow grasses on screen to the bottom left and the frozen reservoir is visible to the right. Image four is another view from the top of the dam looking out over the frozen reservoir. From this angle the user can see a small peninsula of land jutting out into the reservoir that has a parking lot and boat launch available for use. Image five is another view from the top of the dam looking out over the frozen reservoir. The control tower is just visible to the left of the image and the foreground is filled with native grasses. The sixth image is taken from the top of the dam with the control tower in the center of the image. A bench and small gravel area is visible to the left, and the frozen reservoir is visible to the right. The seventh image is of a picnic table and grill located atop the dam. In the distance the control tower is visible along with the frozen reservoir.

Cherry Creek Reservoir – Located towards the right-center of the screen between Aurora and Centennial on the map. Clicking this hotspot opens an image carousel displaying an initial cover page providing the name of the marker followed by six images. There are two buttons on the left side of the carousel; the top, denoted by an "I," will bring the user to a text box providing more information on the mitigation work being highlighted by the hotspot. The button below that will mute and unmute the sound. An X visible at the top right of the screen will close the image carousel and take the user back to the main map. Image one shows an expanse of frozen lake under a grey sky. Image two shows one of the many trails that crisscross around the park. This trail runs alongside the reservoir with trees lining it. Image three shows a different angle of a trail running alongside the reservoir. Between the user and the frozen reservoir is a small grove of trees. Image four is from a slightly elevated position overlooking the frozen reservoir. To the left of the image is a sign detailing fishing regulations for what can be caught from the lake. In the distance there are few ice fishers sitting on the ice. Image five is closer to the shore of the reservoir and is looking towards the earthen dam and large control tower. Image six is taken from near the shore of the reservoir with the earthen dam and control tower to the right. To the left is a large group of ice fishers out on the ice.

Bear Creek Reservoir – Located towards the left, center of the screen near Morrison on the map. Clicking this hotspot opens an image carousel displaying an initial cover page providing the name of the marker followed by 10 images. There are two buttons on the left side of the carousel; the top, denoted by an "I," will bring the user to a text box providing more information on the mitigation work being highlighted by the hotspot. The button below that will mute and unmute the sound. An X visible at the top right of the screen will close the image carousel and take the user back to the main map. The first

image is of the earthen dam from a slightly elevated position. The dam is covered with yellow native grasses, and the sky is a clear blue. The reservoir is just visible to the right side of the screen. Image two is from an elevated position looking out over the entire park. The reservoir is located towards the center of the image, and the horizon is dotted with mountains. Image three is taken looking towards the earthen dam with the control tower in view towards the left of the screen and the reservoir filling much of the center of the image. Image four shows an elevation marker for the reservoir. When the image was taken, the elevation of the water was low and not touching this marker. During a wet season the water will rise, and someone could check the total elevation of the reservoir by reading this marker. Image five is taken from further away but still looking back towards the earthen dam with the reservoir to the right. Image six is taken from an elevated position looking down on the reservoir. Towards the bottom center of the screen there is a bench overlooking the reservoir for hikers to stop and rest. Image seven shows one of the many trails that surround the reservoir and nearby park system. The trail in the image is leading away from the user towards the dam with the reservoir on the right. Image eight is from an elevated position looking down towards the reservoir. In the center of the image there are two boat launches visible along a small beach, and the horizon is dotted with mountains. Image nine is almost entirely the reservoir with blue sky above. The far shore of the reservoir is visible, and the earthen dam is just visible towards the left. Image ten is of the surrounding parkland. The landscape is dotted with yellow native plant species, and many mountains are visible in the distance. The reservoir is just visible towards the center left of the image.

Little Dry Creek at Westminster Station – Located towards the top center of the screen between Westminster and Berkley on the map. Clicking this hotspot opens an image carousel displaying an initial cover page providing the name of the marker followed by four images. There are two buttons on the left side of the carousel; the top, denoted by an “I,” will bring the user to a text box providing more information on the mitigation work being highlighted by the hotspot. The button below that will mute and unmute the sound. An X visible at the top right of the screen will close the image carousel and take the user back to the main map. Image one is taken from an elevated position overlooking the finished park. There is a pedestrian walkway through the center, and on each side are steps with terraced green spaces all leading down towards a large greenspace in the center. Image two is taken from the water level just over the river. Many rocks were deliberately placed here to promote a healthy ecosystem and divide the river up into several sections in the image. Towards the top right of the screen a pedestrian bridge is visible taking walkers over the river safely. Image three is taken from the center of the park. To the left is a new trail that runs alongside the river, and to the right are several trees. The river is deliberately tranquil here through manmade adjustments, and there are several low pedestrian walkways crisscrossing the river. Image four is taken from the water level looking down the river. Many rocks are visible in the waterway, and greenery is seen lining both river banks as well as growing up and around many of the rocks.

Overland Corridor Improvements – Located towards the center of the screen west of Platt Park on the map. Clicking this hotspot opens an image carousel displaying an initial cover page providing the name of the marker followed by two images. There are two buttons on the left side of the carousel; the top, denoted by an “I,” will bring the user to a text box providing more information on the mitigation work being highlighted by the hotspot. The button below that will mute and unmute the sound. An X visible at the top right of the screen will close the image carousel and take the user back to the main map. Image one is taken from over the river with the riverbanks visible on each side. The river is running high in the

image, and there is a small waterfall towards the top center of the image. Image two is taken from over the river with the riverbanks visible on each side. The river is running low in this image, and most of the plant overgrowth on each side of the river has been cleared away. A pedestrian path is visible to the left of the screen that follows along the river.

Johnson Habitat Park – Located towards the center of the screen north of Athmar Park on the map. Clicking this hotspot opens an image carousel displaying an initial cover page providing the name of the marker followed by 16 images. There are two buttons on the left side of the carousel; the top, denoted by an "I," will bring the user to a text box providing more information on the mitigation work being highlighted by the hotspot. The button below that will mute and unmute the sound. An X visible at the top right of the screen will close the image carousel and take the user back to the main map. Image one is a black and white photo that shows a man walking along the river at the bottom right of the image. Image two is a conceptual drawing of the work planned to reduce flood risk at this site. It is an artistic rendering of an aerial view of the park that details where improvements will be made. Image three is a conceptual drawing of the work planned to reduce flood risk at this site. It is an artistic rendering of an aerial view of the park that details where improvements will be made. Image four is a conceptual drawing of the work planned to reduce flood risk at this site. It is an artistic rendering of an aerial view of the park that details where improvements will be made. Image five is a conceptual drawing of the work planned to reduce flood risk at this site. It is an artistic rendering of an aerial view of the park that details where improvements will be made. Image six is a conceptual drawing of the work planned to reduce flood risk at this site. It is an artistic rendering of an aerial view of the park that details where improvements will be made. Image seven shows the park with now completed renovations. This image is taken from near the water line where recently planted native plant species will take root and increase shoreline stability. Image eight is of one the new interactive nature experiences. In the center of the screen is a pile of sticks and logs and a sign to the left of the image encourages children to stack them into creative designs. Image nine is of this same log stacking interactive nature experience. Playing on the logs are six children of various ages. Image ten shows another interactive nature experience along the river shoreline. There are several large boulders arranged in a ring and in the center of the circle are three children playing with hula hoops. Image eleven is taken from the shoreline looking towards a small amphitheater created out of several tiers of rocks. At the bottom is a circular pit meant for bonfires. Image twelve is taken from the center of the park looking towards a large playground. The bottom half of the image is greenspace and there are several children of various ages running across the greenspace towards the playground. Image thirteen is taken from an elevated position above the shoreline looking out over a small creek. The creek is designed to act as a small, calm offshoot of the main river where children can learn about local ecosystems. Image fourteen is a close-up of a trail running through the park. Along this trail are large boulders marking its boundary. Image fifteen is taken at ground level from the center of the park. The center of the image shows the artistic flower design built into the ground using colored stones. Image sixteen shows various colorful artistic designs that have been worked into the park. In the center of the screen a large blue compass is engraved into the ground and towards the top of the screen play areas are shown that use brown and blue mulch to provide additional color to the park.

Grant Frontier Park – Located towards the center of the screen east of College View on the map. Clicking this hotspot opens an image carousel displaying an initial cover page providing the name of the marker followed by 15 images. There are two buttons on the left side of the carousel; the top, denoted

by an “I,” will bring the user to a text box providing more information on the mitigation work being highlighted by the hotspot. The button below that will mute and unmute the sound. An X visible at the top right of the screen will close the image carousel and take the user back to the main map. Image one shows the river before any mitigation actions were completed. The left half of the image shows the river calmly moving by, and across the riverbank are several groves of trees. Image two is a conceptual drawing of the work planned to reduce flood risk at this site. It is an artistic rendering of the park that details where improvements will be made. Image three is a conceptual drawing of the work planned to reduce flood risk at this site. It is an artistic rendering of the park that details where improvements will be made. Image four is a conceptual drawing of the work planned to reduce flood risk at this site. It is an artistic rendering of the park that details where improvements will be made. Image five is a conceptual drawing of the work planned to reduce flood risk at this site. It is an artistic rendering of the park that details where improvements will be made. Image six shows the park while under construction. The river is located on the left side of the screen, and on the right new sections of the park are being landscaped. Image seven shows the same view as image six but now with the construction completed. The river flows by along the left side of the screen and the now-completed new park amenities are on the right. Image eight shows an aerial view of the now completed park. The river is located along the top of the screen with park amenities visible in the center. Image nine shows a section of newly planted park covered in green native plant life. There are several orange flowers visible, and a pedestrian walkway is located near the top left. Image ten shows a pathway running through the center of the park. On the right side of the path is the river, and on the left are a line of boulders marking the path boundary and a hill of green plants sloping up and away from the path. Image eleven shows a pathway winding through the park. On the right side of the pathway is a line of boulders marking the path boundary and a gently sloping hill covered in green plant life. Image twelve shows a well-landscaped section of the park. There are several pedestrian walkways meandering through a green, terraced hillside along with several newly planted trees. Image thirteen is taken from a slightly elevated position looking down over a playground. The playground is surrounded by dense greenery and the river is just visible to the center right of screen. Image fourteen shows an elevated view of the park looking out over the right and newly completed amenities. The river is shown on the left side of the image and the park amenities to the right. Image fifteen shows a section of landscaped park. Several rocks are in view along the bottom of the image and behind them is a small field of yellow and purple flowers. The river is visible along the right of the image and a pedestrian walkway is visible near the top left.

Sanderson Gulch Improvements – Located towards the center of the screen south of Athmar Park and west of Washington Park on the map. Clicking this hotspot opens an image carousel displaying an initial cover page providing the name of the marker followed by six images. There are two buttons on the left side of the carousel; the top, denoted by an “I,” will bring the user to a text box providing more information on the mitigation work being highlighted by the hotspot. The button below that will mute and unmute the sound. An X visible at the top right of the screen will close the image carousel and take the user back to the main map. Image one is an aerial view of the gulch before improvements were implemented. The gulch runs through the center of the screen and is surrounded by commercial buildings. Image two shows a square cement opening under a round one that is the current pathway for water through the area. Image three is a closer view of the square concrete pathway for water under the road. The gulch is currently dry in the image, and some graffiti is visible on the walls. Image four shows the opposite end of the current concrete tunnel. The water is mostly stagnant, and there is graffiti on the walls. Industrial buildings are visible at the top of the image. Image five shows the

opposite end of the current concrete tunnel. The water is mostly stagnant, and there is graffiti on the walls. Industrial buildings are visible at the top of the image. Image six shows a zoomed-out view of the gulch. The grass on each side of the gulch is overgrown, and there are cars parked on each side.

Pasquinel's Landing – Located towards the center of the screen west of Platt Park on the map. Clicking this hotspot opens an image carousel displaying an initial cover page providing the name of the marker followed by 12 images. There are two buttons on the left side of the carousel; the top, denoted by an "I," will bring the user to a text box providing more information on the mitigation work being highlighted by the hotspot. The button below that will mute and unmute the sound. An X visible at the top right of the screen will close the image carousel and take the user back to the main map. Image one shows the river before any mitigation actions were completed. The bottom half of the image shows the river calmly moving by, and across the far riverbank are several groves of trees. Image two is a conceptual drawing of the work planned to reduce flood risk at this site. It is an artistic rendering of an aerial view of the park that details where improvements will be made. Image three is a close-up of newly planted, green native plant species. Image four shows a pedestrian walkway winding along the edge of the waterway while numerous green native plant species grow along the creek riverbed on the left side of the image. Image five is taken from a pedestrian walkway crossing over the creek. The creek travels down the center of the image, and both sides of the creek are covered in green native plant life. Image six shows a green field bordered by trees towards the top of the frame and a pedestrian walkway to the right. Some large grey rocks are present in the center of the image. Image seven shows a natural water pathway leading down from a pedestrian walkway towards the creek. Both sides of this natural pathway are lush with green native plant life. Image eight shows a pathway leading up towards a grove of trees. Image nine is a close-up of numerous native plant species in varying colors of yellow and green. Image ten shows a new nature playground experience. There is a paved trail leading to the edge of an area with several large logs and rocks meant for children to climb around on. Image eleven is the natural playground experience with several logs and rocks for children to climb around on. Image twelve shows a beautiful landscaped section within the park. There is a large green tree in the center of the image which is surrounded by various native plant species.

Sun Valley Riverfront Park – Located towards the top center of the screen next to Denver on the map. Clicking this hotspot opens an image carousel displaying an initial cover page providing the name of the marker followed by 11 images. There are two buttons on the left side of the carousel; the top, denoted by an "I," will bring the user to a text box providing more information on the mitigation work being highlighted by the hotspot. The button below that will mute and unmute the sound. An X visible at the top right of the screen will close the image carousel and take the user back to the main map. Image one shows what this site looked like before any mitigation actions were implemented. There is a road visible along the bottom of the image, and there is a small concrete opening towards the center ringed with plant overgrowth. Image two is a conceptual drawing of the work planned to reduce flood risk at this site. It is an artistic rendering of an aerial view of the park that details where improvements will be made. Image three is a conceptual drawing of the work planned to reduce flood risk at this site. It is an artistic rendering of an aerial view of the park that details where improvements will be made. Image four is a conceptual drawing of the work planned to reduce flood risk at this site. It is an artistic rendering of an aerial view of the park that details where improvements will be made. Image five is taken from the water level looking towards the now completed park. In the center of the image is a new rock formation, and on each side of this formation are clean, sandy areas. Image six is looking down the

creek from just above the waterline. The area is now cleared of plant overgrowth and the slopes have been lessened, which will allow the creek to handle surges of water more effectively and not flood the surrounding areas. Image seven is from inside the park and is looking towards a playground. Image eight is taken from inside the park and looking at a playground. In front of the playground are several large rocks that have been engraved with easy-to-understand information about the hydrologic cycle. Image nine is taken from the riverbank looking down the creek. To the left of the river is a rock formation with a small section of calmer water. Image ten is taken from the far shore of the river looking towards the park. The river runs along the bottom of the image, and the rock formation and sandy areas are visible towards the center. Image eleven shows a large green space with the playground towards the left.

Marker Six On-Site – Future

Tapping on Marker Six will bring the user to a zoomed-out map of the greater Denver region. The map is presented in shades of blue and white with the darkest blues representing roads and bodies of water and the lighter shades representing developed areas. Names of towns are shown in blue text and the visible region stretches from Chatfield Reservoir to the south up to Broomfield in the north and Idaho Springs to the west and Watkins in the east. There will be an instructional pop-up on screen telling the user to "Tap on each hotspot to learn more about future flood risk reduction projects in the Denver area". After a few seconds this pop-up will fade away and the user will be able to start the experience.

On screen there are three buttons on the right and a "back" button in the top left. The top right bottom will provide a text version of the narrative, the second button on the right will turn sound on and off, and the final button at the bottom right of the screen will open up a help page and provide instructions on how to use this marker. Clicking the help page will display a graphic telling the user to tap on each hotspot to learn more about the completed mitigation action. In addition to these, just above the help button are plus and minus symbols. Tapping the plus symbol will zoom in the map and allow a user to focus on a smaller area. Tapping the minus symbol will zoom the user back out.

Across the map there are seven green bubbles or hotspots representing mitigation work that has already been completed. Tapping on each one of these will bring the user to a new screen that provides information and images detailing the hotspot they just opened. The seven hotspots are:

Chatfield Reallocation Project – Located towards the bottom of the screen west of Highlands Ranch on the map. Clicking this hotspot opens an image carousel displaying an initial cover page providing the name of the marker followed by four images. There are two buttons on the left side of the carousel; the top, denoted by an "I," will bring the user to a text box providing more information on the mitigation work being highlighted by the hotspot. The button below that will mute and unmute the sound. An X visible at the top right of the screen will close the image carousel and take the user back to the main map. Image one is a conceptual drawing of the work planned to reduce flood risk at this site. It is an artistic rendering of an aerial view of the park that details where improvements will be made. Image two is a conceptual drawing of the work planned to reduce flood risk at this site. It is an artistic rendering of an aerial view of the park that details where improvements will be made. Image three is of a flyer titled "Environmental Pool" that discusses the impacts of this project on various nearby farms. Image four is a flyer titled "Water for Agriculture" which discusses the impacts of this project on various nearby farms.

South Platte River Ecosystem Restoration – Located towards the top of the screen between Highland and Auraria on the map. Clicking this hotspot opens an image carousel displaying an initial cover page

providing the name of the marker followed by 13 images. There are two buttons on the left side of the carousel; the top, denoted by an "I," will bring the user to a text box providing more information on the mitigation work being highlighted by the hotspot. The button below that will mute and unmute the sound. An X visible at the top right of the screen will close the image carousel and take the user back to the main map. Image one is a conceptual drawing of the work planned to reduce flood risk at this site. It is an artistic rendering of an aerial view of the park that details where improvements will be made. Image two shows how the river in this area looks currently. The water level is low, and the river is constrained by concrete walls along the top of the image. Image three shows a pathway through the area that heads underneath a railroad crossing. While very green, the plants covering the landscape in this image are non-native and detrimental to the health of the nearby ecosystems. Image four is a conceptual drawing of the work planned to reduce flood risk at this site. It is an artistic rendering of an aerial view of the park that details where improvements will be made. Image five is a conceptual drawing of the work planned to reduce flood risk at this site. It is an artistic rendering of an aerial view of the park that details where improvements will be made. Image six is a conceptual drawing of the work planned to reduce flood risk at this site. It is an artistic rendering of a side profile view of the park that details where improvements will be made. Image seven is a conceptual drawing of the work planned to reduce flood risk at this site. It is an artistic rendering of an aerial view of the park that details where improvements will be made. Image eight is a conceptual drawing of the work planned to reduce flood risk at this site. It is an artistic rendering of a side profile view of the park that details where improvements will be made. Image nine is a conceptual drawing of the work planned to reduce flood risk at this site. It is an artistic rendering of an aerial view of the park that details where improvements will be made. Image ten is a conceptual drawing of the work planned to reduce flood risk at this site. It is an artistic rendering of an aerial view of the park that details where improvements will be made. Image eleven is a conceptual drawing of the work planned to reduce flood risk at this site. It is an artistic rendering of a side profile view of the park that details where improvements will be made. Image twelve is a conceptual drawing of the work planned to reduce flood risk at this site. It is an artistic rendering of an aerial view of the park that details where improvements will be made. Image thirteen is a conceptual drawing of the work planned to reduce flood risk at this site. It is an artistic rendering of an aerial view of the park that details where improvements will be made.

Weir Gulch Park & Channel Improvements – Located towards the top of the screen between West Colfax and Denver on the map. Clicking this hotspot opens an image carousel displaying an initial cover page providing the name of the marker followed by eight images. There are two buttons on the left side of the carousel; the top, denoted by an "I," will bring the user to a text box providing more information on the mitigation work being highlighted by the hotspot. The button below that will mute and unmute the sound. An X visible at the top right of the screen will close the image carousel and take the user back to the main map. Image one shows the gulch during a flood event. The water is rushing past and overtopping a number of stairs and pedestrian walkways. Image two is a conceptual drawing of the work planned to reduce flood risk at this site. It is an artistic rendering of an aerial view of the park that details where improvements will be made. Image three is a conceptual drawing of the work planned to reduce flood risk at this site. It is an artistic rendering of an aerial view of the park that details where improvements will be made. Image four is a conceptual drawing of the work planned to reduce flood risk at this site. It is an artistic rendering of an aerial view of the park that details where improvements will be made. Image five is a conceptual drawing of the work planned to reduce flood risk at this site. It is an artistic rendering of an aerial view of the park that details where improvements will be made.

Image six is a conceptual drawing of the work planned to reduce flood risk at this site. It is an artistic rendering of an aerial view of the park that details where improvements will be made. Image seven is a conceptual drawing of the work planned to reduce flood risk at this site. It is an artistic rendering of an aerial view of the park that details where improvements will be made. Image eight is a conceptual drawing of the work planned to reduce flood risk at this site. It is an artistic rendering of a side profile view of the park that details where improvements will be made.

Globeville Landing Park (Park to Platte Project) – Located towards the top of the screen between Globeville and River North Art District on the map. Clicking this hotspot opens an image carousel displaying an initial cover page providing the name of the marker followed by four images. There are two buttons on the left side of the carousel; the top, denoted by an "I," will bring the user to a text box providing more information on the mitigation work being highlighted by the hotspot. The button below that will mute and unmute the sound. An X visible at the top right of the screen will close the image carousel and take the user back to the main map. Image one shows a map that outlines the area that will benefit from flood risk reduction efforts planned. Image two shows a zoomed-out elevation map for Denver with the Globeville area outlined. Viewing the map, it is clear the Globeville lies at a lower elevation than the rest of the city and is a prime candidate for flood mitigation work. The third image shows the proposed area during a flood event. The water level has reached the height of the road along the bottom of the image and in some places has overtopped it slightly. Image four shows the area as it looks now when the river is running low. This section of the river is very rocky, with most of the river on screen filled in with stones. A pedestrian walkway is visible towards the top of the screen.

Future Plans for Confluence Park – Located towards the top of the screen between LoDo and Five Points on the map. Clicking this hotspot opens an image carousel displaying an initial cover page providing the name of the marker followed by 13 images. There are two buttons on the left side of the carousel; the top, denoted by an "I," will bring the user to a text box providing more information on the mitigation work being highlighted by the hotspot. The button below that will mute and unmute the sound. An X visible at the top right of the screen will close the image carousel and take the user back to the main map. Image one shows how the park looked before any renovations were completed. The river runs through the center of the image and a plaza stretches along the far riverbank. Image two is a conceptual drawing of the work planned to reduce flood risk at this site. It is an artistic rendering of an aerial view of the park that details where improvements will be made. Image three is a conceptual drawing of the work planned to reduce flood risk at this site. It is an artistic rendering of a pedestrian view of the park that details where improvements will be made. Image four is a conceptual drawing of the work planned to reduce flood risk at this site. It is an artistic rendering of an aerial view of the park that details where improvements will be made. Image five is a conceptual drawing of the work planned to reduce flood risk at this site. It is an artistic rendering of what the park will look like when all improvements are completed. Image six is a conceptual drawing of the work planned to reduce flood risk at this site. It is an artistic rendering of an aerial view of the park that details where improvements will be made. Image seven shows how the park looked while under construction during the first phase of planned improvements. The view is from Shoemaker Plaza, which is currently under construction. The water has been temporarily drained from in front of the steps, and several tiers have been completed. Green steel is visible, as it marks where the next set of stairs will be anchored in place. Image eight is an aerial view of construction occurring at Shoemaker Plaza. The water has been temporarily drained from in front of the steps, and several tiers have been completed. Green steel is visible, as it marks where the next set of

stairs will be anchored in place. Image nine is a view of the construction around Shoemaker Plaza taken from the other side of the park. The river is running half full, as the other half has been drained to allow for workers to install the large concrete steps. Image ten is taken from the riverbed looking upstream towards the 15th Street Bridge. The water has been temporarily drained, and the user can see anchoring in place to allow installation of additional concrete steps. Image eleven is taken from the now drained portion of the river. This image was taken early during construction and shows the retaining walls being installed before any of the large concrete steps had been laid in place. Image twelve shows how the park looks today with the updated Shoemaker Plaza. The image is taken from the other side of the park looking out across the river. Image thirteen shows the grand opening event for the rebuilt Shoemaker Plaza. The river flows down and around the plaza and out of frame while a large crown of people gathers on the plaza to celebrate the completion of construction.

Harvard Gulch – Located towards the center of the screen between College View and Platt Park on the map. Clicking this hotspot opens an image carousel displaying an initial cover page providing the name of the marker followed by four images. There are two buttons on the left side of the carousel; the top, denoted by an "I," will bring the user to a text box providing more information on the mitigation work being highlighted by the hotspot. The button below that will mute and unmute the sound. An X visible at the top right of the screen will close the image carousel and take the user back to the main map. Image one is taken from just above the river during a flood event. The water courses through most of the image and has topped both banks. Image two shows the gulch as it looks when dry. Non-native plant life grows over the edges of the concrete gulch, and there is a pedestrian walkway visible towards the center of the image. Image three is a conceptual drawing of the work planned to reduce flood risk at this site. It is an artistic rendering of an aerial view of the park that details where improvements will be made. Image four details the various types of nonstructural flood risk reduction being done at this site. In this image there are several small images, including one titled "Elevation," which shows a home being put on stilts, one titled "Dry Floodproofing," which shows a water barrier placed between the entry point to a building and the water, one titled "Wet Floodproofing," which is an illustration of a house that is designed to flood with minimal impacts to the home, and one titled "Acquisition/Relocation," which shows a home that has been purchased by a governmental entity being torn down to remove it completely from the flood zone.

Sanderson Gulch Improvement – Located towards the center of the screen south of Athmar Park and west of Washington Park on the map. Clicking this hotspot opens an image carousel displaying an initial cover page providing the name of the marker followed by six images. There are two buttons on the left side of the carousel; the top, denoted by an "I," will bring the user to a text box providing more information on the mitigation work being highlighted by the hotspot. The button below that will mute and unmute the sound. An X visible at the top right of the screen will close the image carousel and take the user back to the main map. Image one is an aerial view of the gulch before improvements were implemented. The gulch runs through the center of the screen and is surrounded by commercial buildings. Image two shows a square cement opening under a round one that is the current pathway for water through the area. Image three is a closer view of the square concrete pathway for water under the road. The gulch is currently dry in the image, and some graffiti is visible on the walls. Image four shows the opposite end of the current concrete tunnel. The water is mostly stagnant, and there is graffiti on the walls. Industrial buildings are visible at the top of the image. Image five shows the opposite end of the current concrete tunnel. The water is mostly stagnant, and there is graffiti on the

walls. Industrial buildings are visible at the top of the image. Image six shows a zoomed-out view of the gulch. The grass on each side of the gulch is overgrown, and there are cars parked on each side.

Markers Off-Site

If the user is off-site they will be brought to a screen with six icons that denote marker numbers one through six. Each marker offers a different experience to the user. Marker One is titled “Historic Floods” and allows a user to visualized four different historic flood events in Confluence Park. Marker Two is titled “Flood of 1965” which allows the user to visualize in greater detail the major flood event of 1965. Three is titled “Portal to Confluence Park” and allows a user to create a doorway that they then walk through and enter a 365-degree view of the park. Marker Four is titled “Past” and allows the user to compare historic photos against current photos to see how far the park has come. Marker Five is titled “Present” and shows a regional view of Denver where a user can learn about mitigation projects already completed. Marker Six is titled “Future” and shows a region view of Denver where the user can learn about mitigation projects planned for the future.

There is also a menu accessible by tapping the three lines in the top left corner that allows the user to learn more about the application, toggle between different locations, toggle between English and Spanish, toggle between on-site and off-site experiences if standing in the park, turn sound on and off, and view the terms and conditions.

Marker One Off-Site – Historic Floods

Upon selecting Marker One, the user will see through their phone Confluence Park from the vantage point of the actual marker in Confluence Park. They are standing in the approximate middle of the park looking out over the confluence of the South Platte River and Cherry Creek from an elevated position approximately 20 feet above the river. To their left is Shoemaker Plaza, directly in front of them is a set of manmade rapids for local kayakers to enjoy, and to their right is the Speer Boulevard Platte River Bridge. A voiceover, either in English or Spanish, should begin playing shortly after starting this experience that teaches the user about historic flood risk on the river.

On screen, there are four buttons to the right and a slider moving up and down on the left. The top right button is a camera that takes a screenshot of what the user is looking at and allows them to share that image on social media. The next button down presents a text version of the voiceover. The button below that will turn the sound on or off, and the final button opens a help screen that teaches the user how to experience this marker. The slider on the left has four options: 13.1 feet, which represents the recent flood of 2015; 18.3 feet, which represents a 100-year flood event; 20 feet, which represents the historic flood of 1864, and 28 feet, which represents the catastrophic flood of 1965. Sliding this up and down will raise and lower water levels, giving the user an approximate idea on what these floods would look like in Confluence Park if they were to occur today.

13.1 feet shows the user an image close to the everyday water level. The park is almost fully functional with water overtopping the steps of Shoemaker Plaza and washing up near the pedestrian trail on the other side of the river from where the app use is standing.

18.3 feet represents an eventful flood event. The water stretches completely over Shoemaker plaza to the grassy areas on the opposite side of the river. The park is nearly completely underwater with water coming up as high as just a few feet below where the app user is standing.

20 feet takes the flood event a bit higher and now water is just below the users' feet as they look out over a flooded park. The park is underwater from edge to edge and all park amenities are inaccessible.

28 feet represents the worst-case flood event for Confluence Park. The user is now waist deep in floodwaters with the waters stretching in all directions as far as the user can see. No part of the park is accessible at this flood level and the water comes up to just below the vehicle bridges to the north and south sides of the park.

When finished with this experience, the user must tap the "Back" button in the top left corner, which takes them back to the menu displaying the six marker experiences.

Marker Two Off-Site – Flood of 1965

Upon selecting Marker Two, the user will see through their phone Confluence Park from the vantage point of the actual marker in Confluence Park. They are standing in the southeast corner of the park looking out over the South Platte River towards Shoemaker Plaza. To their right is the 15th Street Bridge, to their left is Cherry Creek, and behind them are stairs leading up and out of the park. A voiceover, either in English or Spanish, should begin playing shortly after starting this experience that teaches the user about the historic 1965 flood.

On screen there are three buttons on the right and a "back" button in the top left. The top right bottom will provide a text version of the narrative, the second button on the right will turn sound on and off, and the final button at the bottom right of the screen will open a help page and provide instructions on how to use this marker. Clicking the help page will display a graphic telling the user to use their phone to look around and experience the content.

At this marker the user will see the park as if they were back in 1965. To produce this illusion the image on their phone has been filtered to show a black and white version of the park. All around them is trash and debris, all washed up in the park because of the catastrophic flood. Directly in front of them is a destroyed couch, to their left and right are overturned garbage cans and various types of miscellaneous trash and debris are shown throughout the park.

When finished with this experience, the user must tap the "Back" button in the top left corner, which takes them back to the menu displaying the six marker experiences.

Marker Three Off-Site – Portal to Confluence Park

Upon selecting Marker Three, the user will initially see whatever environment they are currently standing it. There will be an instructional pop-up on screen telling the user to "Aim the camera at the ground to start tracking your position and activate the portal to Confluence Park". After a few seconds this pop-up will fade away and the user will be able to start the experience.

On screen there are three buttons on the right and a "back" button in the top left. The top right bottom will provide a text version of the narrative, the second button on the right will turn sound on and off, and the final button at the bottom right of the screen will open a help page and provide instructions on how to use this marker. Clicking the help page will display a graphic telling the user to walk through the portal into Confluence Park.

To access the marker three content, the user must point their phone towards the ground until a blue box appears on screen. Tapping on this blue box will create a doorway on screen with Confluence Park visible on the other side. The user will then physically walk forwards and through the doorway to find themselves inside the middle of Confluence Park standing directly on Shoemaker Plaza. Now in Confluence Park the user can use their phone to look around in all directions. It's a beautiful day in the park and the river water levels are around their average height. Panning left to right the user will see seven green bubbles hovering over important locations in the park. Tapping on each one of these will bring the user to a new screen that provides information and images detailing the hotspot they just opened. The seven hotspots are:

Xeriscaping Techniques – Denoted by a flower icon, is located next to Shoemaker Plaza towards the north side of the park. Clicking this hotspot opens an image carousel displaying an initial cover page providing the name of the marker followed by four images. The first image is picture of the native plant life as planted near Shoemaker Plaza looking northwest. The image includes numerous yellow, green, and red shrubs, which are all designed to thrive in Colorado's dry environment with minimal maintenance requirements. The second image is of the same plant life a little further north of the first image. The third image is of the same planted area, this time looking towards the northeast. The final image is looking northwest towards Shoemaker Plaza and shows the same groupings of native plant life.

Rebuilt Trail System – Denoted by a wavy trail icon, is located on the south side of the South Platte River along the river itself. Clicking this hotspot opens an image carousel displaying an initial cover page providing the name of the marker followed by two images. The first image is taken from near ground level and is looking northwest over the waterside trail. In the image the user can clearly see the trail, the South Platte River directly in front of them, the Speer Street Bridge to the left, and Shoemaker Plaza to the right. The second image is taken from a higher vantage point and offers the same view of the park, now with the Speer Street bridge in the center and the trail running out of frame to the bottom right.

Increased Land Value – Denoted by a building icon, is located on the south side of the park hovering above the large new apartment complex that borders the park. Clicking this hotspot opens an image carousel displaying an initial cover page providing the name of the marker followed by two images. The first image shows a row of grey and white, four story tall apartment buildings that run along the northern border of the park. Many of these apartments have balconies that offer great views of the river and park and between the buildings, and the river is a stretch of land gently sloping downward towards the user and covered in native plant life. The second image shows the recently-built skyscraper that borders the southern edge of the park. In front of the building is a red sign noting that the user is currently in Confluence Park.

Return of Wildlife – Denoted by a fish icon, is located towards the middle of the South Platte River when looking south. Clicking this hotspot opens an image carousel displaying an initial cover page providing the name of the marker followed by seven images. The first image is of a green and white flowering plant species called the Ute Ladies'-tresses. The second image is of a grey mouse called the Preble's Meadow Jumping Mouse, the third image is of a pink and white flowering plant species called the Colorado Butterfly Plant, the fourth image is of a teal, gold, and burnt orange fish called the Iowa Darter, the fifth image is of a green and yellow frog with dark green circle patterns on its back called the Northern Leopard Frog, the sixth image is of a brown mammal in a green field called the North American River Otter, the seventh and final image is of a brown and white bird called the Western Yellow-Billed

Cuckoo. All these images represent the native species that have returned to Confluence Park following the work done to revitalize the area.

Artwork Along Retaining Wall – Denoted by a paintbrush icon, is located across the river near the confluence of the South Platte River and Cherry Creek. Clicking this hotspot opens an image carousel displaying an initial cover page providing the name of the marker followed by 12 images. The first image is of a painting of a forest done in reds and oranges with a wild bird towards the middle. The second image is a detailed drawing of a buffalo with brown hair and a white head. The third image is a small cityscape done in black and white. The houses are close together with many windows visible of varying shapes and sizes. The fourth image is of a bird sitting on a branch. The leaves on the branch are colored blue, green, and pink, and the bird is mostly black with some orange and white coloration on its wings. The branch also has nine red berries attached to it. The background of the image is blue with an orange circle on the right side. The fifth image is a different angle of the same bird on a branch picture shown in image four. The sixth image is of a turtle standing on a grey rock. The turtle has its neck outstretched and is painted green and yellow. The seventh image is a close-up picture of the same turtle. This image is focusing only on its head and wide-eyed expression. The eighth image is a landscape of several jagged mountains with a circular pattern in the background. The mountains are painted in shades of blues and whites, with the circular pattern done in brown, orange, and white. The ninth image shows a dinosaur, likely a Stegosaurus, with green scales and brown and orange plates on its back. It is walking across a gray rock towards a tree with green leaves. The tenth image shows a pair of birds over wild background design. The bird in the center is very detailed with grey feathers and an orange and black bill, while the bird to its left is abstract and painted more to blend in with the background design. The background is a mix of shapes painted blue, red, orange, and black. The eleventh image is a close-up of a wild bird in an orange forest. The bird is looking towards the viewer and its feathers are a mix of brown, blue, red, and orange. The twelfth and final image is of a face with its eyes closed, surrounded by detailed abstract patterns. The face is tan with large eyes and a small mouth and nose.

Continued Park Use During Minor Floods – Denoted by a steps icon, is located behind the user above the steps on Shoemaker Plaza. Clicking this hotspot opens an image carousel displaying an initial cover page providing the name of the marker followed by five images. The first image is a close-up of the steps on Shoemaker Plaza. Eight steps made of smooth concrete are visible, with each step designed to disappear under floodwaters and reemerge undamaged once the waters recede. The second image is of Shoemaker Plaza looking towards the northwest. The South Platte River takes up a majority of the bottom left of the image, and the Speer Street bridge is visible to the top left. The third image is another close-up of the concrete steps built for Shoemaker Plaza and some of the native plant life that has been xeriscaped into the area. The fourth image is another close-up picture showing the well-designed concrete steps leading from the pedestrian walkways above down to the water below. The fifth image shows Shoemaker Plaza during a very minor flood event. In this image the user can see the water level has risen enough to cover several of the lowest levels of steps and is rushing back toward the camera and out of frame. Just one level of steps separates the viewer from the water level, but the plaza itself is undamaged and will return to full functionality as soon as the water levels drop back to normal.

Artificial Whitewater Course – Denoted by an icon of three wavy lines, is located to the northeast of the user over the river. Clicking this hotspot opens an image carousel displaying an initial cover page providing the name of the marker followed by two images. The first image is taken from above the artificial whitewater course looking west down the South Platte River. Most of the park is in the frame,

including Shoemaker Plaza to the left and the rebuilt trail system and artwork along the retaining wall to the right. The second image is taken from the water level looking east up the artificial whitewater course towards the Speer Street Bridge. Only the bridge and rapids are displayed from this view, and it is easy to make out the numerous dips and swirls of the whitewater course.

When finished with this experience, the user must tap the "Back" button in the top left corner, which takes them back to the menu displaying the six marker experiences.

Marker Four Off-Site – Past

Upon selecting Marker Four, the user will see through their phone Confluence Park from a vantage point in the northwest corner of Confluence Park. They are standing near a pedestrian footbridge that crosses over the South Platte River with the Speer Street Bridge to their right and the park to their left.

On screen, there are four buttons to the right. The top right button is a camera that takes a screenshot of what the user is looking at and allows them to share that image on social media. The next button down presents a text version of the voiceover. The button below that will turn the sound on or off, and the final button opens a help screen that teaches the user how to experience this marker. Tapping the "help" button brings the user to a screen detailing the functionality of each button and how to use the slider present throughout this marker's experience to compare past and present imagery of the park.

Looking to their right, the user will see two green bubbles hovering over the park near the Speer Street Bridge. Looking to their left, the user will see another two bubbles hovering over Shoemaker Plaza. Clicking each of these hotspots will bring up an image with a slidable feature in the middle. Moving this slider to the right will reveal the full version of a historic photograph taken from the vantage point of the chosen hotspot. Moving the slider to the left will reveal a modern photo taken from the same vantage point that allows the user to see how the area has changed over the last forty years.

Starting with the makers to the right, the higher hotspot will display an image of the Denver Tramway Building. Sliding fully to the right will reveal a black and white version of the building with smokestacks sticking out from the roof and railroad tracks along the front of the building. Sliding to the left reveals the building as it is now, an REI flagship store with the railroad tracks replaced with pedestrian and bike pathways.

Tapping on the other hotspot to the user's right shows a black and white image of the park from the southeast looking northwest. In it the Denver Tramway building is visible to the left, and old versions of the pedestrian walkway over the South Platte River and Shoemaker Plaza are visible. Sliding to the left reveals the modern park with the now-updated walkways and Shoemaker Plaza, the Denver Tramway building now housing REI, and the new modern apartment buildings bordering the northern side of the park.

Looking towards the hotspots on the left, the hotspot furthest to the left offers a view from the northeast looking southwest. Sliding fully to the right reveals the old pedestrian walkways leading down to the river, as well as undeveloped land towards the center of the image. Sliding fully to the left reveals the more pedestrian-friendly and accessible pathways down to the water, the modern version of Shoemaker Plaza, the updated Speer Street Bridge, and amenities at Elitch Gardens rising in the background.

The final hotspot provides a view from over the South Platte River looking southwest. Sliding fully to the right reveals a black and white image of the old waterfront plaza. Sliding fully to the left reveals the updated Shoemaker Plaza, Speer Street Bridge, and artificial whitewater course.

When finished with this experience, the user must tap the “Back” button in the top left corner, which takes them back to the menu displaying the six marker experiences.

Marker Five Off-Site – Present

Tapping on marker five will bring the user to a zoomed-out map of the greater Denver region. The map is presented in shades of blue and white with the darkest blues representing roads and bodies of water and the lighter shades representing developed areas. Names of towns are shown in blue text and the visible region stretches from Chatfield Reservoir to the south up to Broomfield in the north and Idaho Springs to the west and Watkins in the east. There will be an instructional pop-up on screen telling the user to “Tap on each hotspot to learn more about current flood risk reduction projects in the Denver area”. After a few seconds this pop-up will fade away and the user will be able to start the experience.

On screen there are three buttons on the right and a “back” button in the top left. The top right bottom will provide a text version of the narrative, the second button on the right will turn sound on and off, and the final button at the bottom right of the screen will open a help page and provide instructions on how to use this marker. Clicking the help page will display a graphic telling the user to tap on each hotspot to learn more about the completed mitigation action. In addition to these, just above the help button are plus and minus symbols. Tapping the plus symbol will zoom in the map and allow the user to focus on a smaller area. Tapping the minus symbol will zoom the user back out.

Across the map there are ten green bubbles or hotspots representing mitigation work that has already been completed. Tapping on each one of these will bring the user to a new screen that provides information and images detailing the hotspot they just opened. The ten hotspots are:

Chatfield Reservoir – Located towards the bottom center of the screen north of Roxborough Park and west of Highlands Ranch on the map. Clicking this hotspot opens an image carousel displaying an initial cover page providing the name of the marker followed by seven images. There are two buttons on the left side of the carousel; the top, denoted by an “I,” will bring the user to a text box providing more information on the mitigation work being highlighted by the hotspot. The button below that will mute and unmute the sound. An X visible at the top right of the screen will close the image carousel and take the user back to the main map. Image one shows the earthen dam and control structure, the frozen reservoir, and two people ice fishing on the surface of the lake. Image two is taken from the top of the earthen dam looking out over the frozen lake. Between the user and the reservoir are some picnic tables and a path leading towards the reservoir. Image three is taken from the top of the earthen dam looking towards the control tower. There are some native yellow grasses on screen to the bottom left and the frozen reservoir is visible to the right. Image four is another view from the top of the dam looking out over the frozen reservoir. From this angle the user can see a small peninsula of land jutting out into the reservoir that has a parking lot and boat launch available for use. Image five is another view from the top of the dam looking out over the frozen reservoir. The control tower is just visible to the left of the image and the foreground is filled with native grasses. The sixth image is taken from the top of the dam with the control tower in the center of the image. A bench and small gravel area is visible to the left, and

the frozen reservoir is visible to the right. The seventh image is of a picnic table and grill located atop the dam. In the distance the control tower is visible along with the frozen reservoir.

Cherry Creek Reservoir – Located towards the right-center of the screen between Aurora and Centennial on the map. Clicking this hotspot opens an image carousel displaying an initial cover page providing the name of the marker followed by six images. There are two buttons on the left side of the carousel; the top, denoted by an "I," will bring the user to a text box providing more information on the mitigation work being highlighted by the hotspot. The button below that will mute and unmute the sound. An X visible at the top right of the screen will close the image carousel and take the user back to the main map. Image one shows an expanse of frozen lake under a grey sky. Image two shows one of the many trails that crisscross around the park. This trail runs alongside the reservoir with trees lining it. Image three shows a different angle of a trail running alongside the reservoir. Between the user and the frozen reservoir is a small grove of trees. Image four is from a slightly elevated position overlooking the frozen reservoir. To the left of the image is a sign detailing fishing regulations for what can be caught from the lake. In the distance there are few ice fishers sitting on the ice. Image five is closer to the shore of the reservoir and is looking towards the earthen dam and large control tower. Image six is taken from near the shore of the reservoir with the earthen dam and control tower to the right. To the left is a large group of ice fishers out on the ice.

Bear Creek Reservoir – Located towards the left, center of the screen near Morrison on the map. Clicking this hotspot opens an image carousel displaying an initial cover page providing the name of the marker followed by 10 images. There are two buttons on the left side of the carousel; the top, denoted by an "I," will bring the user to a text box providing more information on the mitigation work being highlighted by the hotspot. The button below that will mute and unmute the sound. An X visible at the top right of the screen will close the image carousel and take the user back to the main map. The first image is of the earthen dam from a slightly elevated position. The dam is covered with yellow native grasses, and the sky is a clear blue. The reservoir is just visible to the right side of the screen. Image two is from an elevated position looking out over the entire park. The reservoir is located towards the center of the image, and the horizon is dotted with mountains. Image three is taken looking towards the earthen dam with the control tower in view towards the left of the screen and the reservoir filling much of the center of the image. Image four shows an elevation marker for the reservoir. When the image was taken, the elevation of the water was low and not touching this marker. During a wet season the water will rise, and someone could check the total elevation of the reservoir by reading this marker. Image five is taken from further away but still looking back towards the earthen dam with the reservoir to the right. Image six is taken from an elevated position looking down on the reservoir. Towards the bottom center of the screen there is a bench overlooking the reservoir for hikers to stop and rest. Image seven shows one of the many trails that surround the reservoir and nearby park system. The trail in the image is leading away from the user towards the dam with the reservoir on the right. Image eight is from an elevated position looking down towards the reservoir. In the center of the image there are two boat launches visible along a small beach, and the horizon is dotted with mountains. Image nine is almost entirely the reservoir with blue sky above. The far shore of the reservoir is visible, and the earthen dam is just visible towards the left. Image ten is of the surrounding parkland. The landscape is dotted with yellow native plant species, and many mountains are visible in the distance. The reservoir is just visible towards the center left of the image.

Little Dry Creek at Westminster Station – Located towards the top center of the screen between Westminster and Berkley on the map. Clicking this hotspot opens an image carousel displaying an initial cover page providing the name of the marker followed by four images. There are two buttons on the left side of the carousel; the top, denoted by an "I," will bring the user to a text box providing more information on the mitigation work being highlighted by the hotspot. The button below that will mute and unmute the sound. An X visible at the top right of the screen will close the image carousel and take the user back to the main map. Image one is taken from an elevated position overlooking the finished park. There is a pedestrian walkway through the center, and on each side are steps with terraced green spaces all leading down towards a large greenspace in the center. Image two is taken from the water level just over the river. Many rocks were deliberately placed here to promote a healthy ecosystem and divide the river up into several sections in the image. Towards the top right of the screen a pedestrian bridge is visible taking walkers over the river safely. Image three is taken from the center of the park. To the left is a new trail that runs alongside the river, and to the right are several trees. The river is deliberately tranquil here through manmade adjustments, and there are several low pedestrian walkways crisscrossing the river. Image four is taken from the water level looking down the river. Many rocks are visible in the waterway, and greenery is seen lining both river banks as well as growing up and around many of the rocks.

Overland Corridor Improvements – Located towards the center of the screen west of Platt Park on the map. Clicking this hotspot opens an image carousel displaying an initial cover page providing the name of the marker followed by two images. There are two buttons on the left side of the carousel; the top, denoted by an "I," will bring the user to a text box providing more information on the mitigation work being highlighted by the hotspot. The button below that will mute and unmute the sound. An X visible at the top right of the screen will close the image carousel and take the user back to the main map. Image one is taken from over the river with the riverbanks visible on each side. The river is running high in the image, and there is a small waterfall towards the top center of the image. Image two is taken from over the river with the riverbanks visible on each side. The river is running low in this image, and most of the plant overgrowth on each side of the river has been cleared away. A pedestrian path is visible to the left of the screen that follows along the river.

Johnson Habitat Park – Located towards the center of the screen north of Athmar Park on the map. Clicking this hotspot opens an image carousel displaying an initial cover page providing the name of the marker followed by 16 images. There are two buttons on the left side of the carousel; the top, denoted by an "I," will bring the user to a text box providing more information on the mitigation work being highlighted by the hotspot. The button below that will mute and unmute the sound. An X visible at the top right of the screen will close the image carousel and take the user back to the main map. Image one is a black and white photo that shows a man walking along the river at the bottom right of the image. Image two is a conceptual drawing of the work planned to reduce flood risk at this site. It is an artistic rendering of an aerial view of the park that details where improvements will be made. Image three is a conceptual drawing of the work planned to reduce flood risk at this site. It is an artistic rendering of an aerial view of the park that details where improvements will be made. Image four is a conceptual drawing of the work planned to reduce flood risk at this site. It is an artistic rendering of an aerial view of the park that details where improvements will be made. Image five is a conceptual drawing of the work planned to reduce flood risk at this site. It is an artistic rendering of an aerial view of the park that details where improvements will be made. Image six is a conceptual drawing of the work planned to

reduce flood risk at this site. It is an artistic rendering of an aerial view of the park that details where improvements will be made. Image seven shows the park with now completed renovations. This image is taken from near the water line where recently planted native plant species will take root and increase shoreline stability. Image eight is of one the new interactive nature experiences. In the center of the screen is a pile of sticks and logs and a sign to the left of the image encourages children to stack them into creative designs. Image nine is of this same log stacking interactive nature experience. Playing on the logs are six children of various ages. Image ten shows another interactive nature experience along the river shoreline. There are several large boulders arranged in a ring and in the center of the circle are three children playing with hula hoops. Image eleven is taken from the shoreline looking towards a small amphitheater created out of several tiers of rocks. At the bottom is a circular pit meant for bonfires. Image twelve is taken from the center of the park looking towards a large playground. The bottom half of the image is greenspace and there are several children of various ages running across the greenspace towards the playground. Image thirteen is taken from an elevated position above the shoreline looking out over a small creek. The creek is designed to act as a small, calm offshoot of the main river where children can learn about local ecosystems. Image fourteen is a close-up of a trail running through the park. Along this trail are large boulders marking its boundary. Image fifteen is taken at ground level from the center of the park. The center of the image shows the artistic flower design built into the ground using colored stones. Image sixteen shows various colorful artistic designs that have been worked into the park. In the center of the screen a large blue compass is engraved into the ground and towards the top of the screen play areas are shown that use brown and blue mulch to provide additional color to the park.

Grant Frontier Park – Located towards the center of the screen east of College View on the map. Clicking this hotspot opens an image carousel displaying an initial cover page providing the name of the marker followed by 15 images. There are two buttons on the left side of the carousel; the top, denoted by an “I,” will bring the user to a text box providing more information on the mitigation work being highlighted by the hotspot. The button below that will mute and unmute the sound. An X visible at the top right of the screen will close the image carousel and take the user back to the main map. Image one shows the river before any mitigation actions were completed. The left half of the image shows the river calmly moving by, and across the riverbank are several groves of trees. Image two is a conceptual drawing of the work planned to reduce flood risk at this site. It is an artistic rendering of the park that details where improvements will be made. Image three is a conceptual drawing of the work planned to reduce flood risk at this site. It is an artistic rendering of the park that details where improvements will be made. Image four is a conceptual drawing of the work planned to reduce flood risk at this site. It is an artistic rendering of the park that details where improvements will be made. Image five is a conceptual drawing of the work planned to reduce flood risk at this site. It is an artistic rendering of the park that details where improvements will be made. Image six shows the park while under construction. The river is located on the left side of the screen, and on the right new sections of the park are being landscaped. Image seven shows the same view as image six but now with the construction completed. The river flows by along the left side of the screen and the now-completed new park amenities are on the right. Image eight shows an aerial view of the now completed park. The river is located along the top of the screen with park amenities visible in the center. Image nine shows a section of newly planted park covered in green native plant life. There are several orange flowers visible, and a pedestrian walkway is located near the top left. Image ten shows a pathway running through the center of the park. On the right side of the path is the river, and on the left are a line of boulders marking the path boundary and a

hill of green plants sloping up and away from the path. Image eleven shows a pathway winding through the park. On the right side of the pathway is a line of boulders marking the path boundary and a gently sloping hill covered in green plant life. Image twelve shows a well-landscaped section of the park. There are several pedestrian walkways meandering through a green, terraced hillside along with several newly planted trees. Image thirteen is taken from a slightly elevated position looking down over a playground. The playground is surrounded by dense greenery and the river is just visible to the center right of screen. Image fourteen shows an elevated view of the park looking out over the right and newly completed amenities. The river is shown on the left side of the image and the park amenities to the right. Image fifteen shows a section of landscaped park. Several rocks are in view along the bottom of the image and behind them is a small field of yellow and purple flowers. The river is visible along the right of the image and a pedestrian walkway is visible near the top left.

Sanderson Gulch Improvements – Located towards the center of the screen south of Athmar Park and west of Washington Park on the map. Clicking this hotspot opens an image carousel displaying an initial cover page providing the name of the marker followed by six images. There are two buttons on the left side of the carousel; the top, denoted by an "I," will bring the user to a text box providing more information on the mitigation work being highlighted by the hotspot. The button below that will mute and unmute the sound. An X visible at the top right of the screen will close the image carousel and take the user back to the main map. Image one is an aerial view of the gulch before improvements were implemented. The gulch runs through the center of the screen and is surrounded by commercial buildings. Image two shows a square cement opening under a round one that is the current pathway for water through the area. Image three is a closer view of the square concrete pathway for water under the road. The gulch is currently dry in the image, and some graffiti is visible on the walls. Image four shows the opposite end of the current concrete tunnel. The water is mostly stagnant, and there is graffiti on the walls. Industrial buildings are visible at the top of the image. Image five shows the opposite end of the current concrete tunnel. The water is mostly stagnant, and there is graffiti on the walls. Industrial buildings are visible at the top of the image. Image six shows a zoomed-out view of the gulch. The grass on each side of the gulch is overgrown, and there are cars parked on each side.

Pasquinel's Landing – Located towards the center of the screen west of Platt Park on the map. Clicking this hotspot opens an image carousel displaying an initial cover page providing the name of the marker followed by 12 images. There are two buttons on the left side of the carousel; the top, denoted by an "I," will bring the user to a text box providing more information on the mitigation work being highlighted by the hotspot. The button below that will mute and unmute the sound. An X visible at the top right of the screen will close the image carousel and take the user back to the main map. Image one shows the river before any mitigation actions were completed. The bottom half of the image shows the river calmly moving by, and across the far riverbank are several groves of trees. Image two is a conceptual drawing of the work planned to reduce flood risk at this site. It is an artistic rendering of an aerial view of the park that details where improvements will be made. Image three is a close-up of newly planted, green native plant species. Image four shows a pedestrian walkway winding along the edge of the waterway while numerous green native plant species grow along the creek riverbed on the left side of the image. Image five is taken from a pedestrian walkway crossing over the creek. The creek travels down the center of the image, and both sides of the creek are covered in green native plant life. Image six shows a green field bordered by trees towards the top of the frame and a pedestrian walkway to the right. Some large grey rocks are present in the center of the image. Image seven shows a natural water

pathway leading down from a pedestrian walkway towards the creek. Both sides of this natural pathway are lush with green native plant life. Image eight shows a pathway leading up towards a grove of trees. Image nine is a close-up of numerous native plant species in varying colors of yellow and green. Image ten shows a new nature playground experience. There is a paved trail leading to the edge of an area with several large logs and rocks meant for children to climb around on. Image eleven is the natural playground experience with several logs and rocks for children to climb around on. Image twelve shows a beautiful landscaped section within the park. There is a large green tree in the center of the image which is surrounded by various native plant species.

Sun Valley Riverfront Park – Located towards the top center of the screen next to Denver on the map. Clicking this hotspot opens an image carousel displaying an initial cover page providing the name of the marker followed by 11 images. There are two buttons on the left side of the carousel; the top, denoted by an "I," will bring the user to a text box providing more information on the mitigation work being highlighted by the hotspot. The button below that will mute and unmute the sound. An X visible at the top right of the screen will close the image carousel and take the user back to the main map. Image one shows what this site looked like before any mitigation actions were implemented. There is a road visible along the bottom of the image, and there is a small concrete opening towards the center ringed with plant overgrowth. Image two is a conceptual drawing of the work planned to reduce flood risk at this site. It is an artistic rendering of an aerial view of the park that details where improvements will be made. Image three is a conceptual drawing of the work planned to reduce flood risk at this site. It is an artistic rendering of an aerial view of the park that details where improvements will be made. Image four is a conceptual drawing of the work planned to reduce flood risk at this site. It is an artistic rendering of an aerial view of the park that details where improvements will be made. Image five is taken from the water level looking towards the now completed park. In the center of the image is a new rock formation, and on each side of this formation are clean, sandy areas. Image six is looking down the creek from just above the waterline. The area is now cleared of plant overgrowth and the slopes have been lessened, which will allow the creek to handle surges of water more effectively and not flood the surrounding areas. Image seven is from inside the park and is looking towards a playground. Image eight is taken from inside the park and looking at a playground. In front of the playground are several large rocks that have been engraved with easy-to-understand information about the hydrologic cycle. Image nine is taken from the riverbank looking down the creek. To the left of the river is a rock formation with a small section of calmer water. Image ten is taken from the far shore of the river looking towards the park. The river runs along the bottom of the image, and the rock formation and sandy areas are visible towards the center. Image eleven shows a large green space with the playground towards the left.

Marker Six Off-Site – Future

Tapping on Marker Six will bring the user to a zoomed-out map of the greater Denver region. The map is presented in shades of blue and white with the darkest blues representing roads and bodies of water and the lighter shades representing developed areas. Names of towns are shown in blue text and the visible region stretches from Chatfield Reservoir to the south up to Broomfield in the north and Idaho Springs to the west and Watkins in the east. There will be an instructional pop-up on screen telling the user to "Tap on each hotspot to learn more about future flood risk reduction projects in the Denver area". After a few seconds this pop-up will fade away and the user will be able to start the experience.

On screen there are three buttons on the right and a “back” button in the top left. The top right bottom will provide a text version of the narrative, the second button on the right will turn sound on and off, and the final button at the bottom right of the screen will open up a help page and provide instructions on how to use this marker. Clicking the help page will display a graphic telling the user to tap on each hotspot to learn more about the completed mitigation action. In addition to these, just above the help button are plus and minus symbols. Tapping the plus symbol will zoom in the map and allow the user to focus on a smaller area. Tapping the minus symbol will zoom the user back out.

Across the map there are seven green bubbles or hotspots representing mitigation work that has already been completed. Tapping on each one of these will bring the user to a new screen that provides information and images detailing the hotspot they just opened. The seven hotspots are:

Chatfield Reallocation Project – Located towards the bottom of the screen west of Highlands Ranch on the map. Clicking this hotspot opens an image carousel displaying an initial cover page providing the name of the marker followed by four images. There are two buttons on the left side of the carousel; the top, denoted by an “I,” will bring the user to a text box providing more information on the mitigation work being highlighted by the hotspot. The button below that will mute and unmute the sound. An X visible at the top right of the screen will close the image carousel and take the user back to the main map. Image one is a conceptual drawing of the work planned to reduce flood risk at this site. It is an artistic rendering of an aerial view of the park that details where improvements will be made. Image two is a conceptual drawing of the work planned to reduce flood risk at this site. It is an artistic rendering of an aerial view of the park that details where improvements will be made. Image three is of a flyer titled “Environmental Pool” that discusses the impacts of this project on various nearby farms. Image four is a flyer titled “Water for Agriculture” which discusses the impacts of this project on various nearby farms.

South Platte River Ecosystem Restoration – Located towards the top of the screen between Highland and Auraria on the map. Clicking this hotspot opens an image carousel displaying an initial cover page providing the name of the marker followed by 13 images. There are two buttons on the left side of the carousel; the top, denoted by an “I,” will bring the user to a text box providing more information on the mitigation work being highlighted by the hotspot. The button below that will mute and unmute the sound. An X visible at the top right of the screen will close the image carousel and take the user back to the main map. Image one is a conceptual drawing of the work planned to reduce flood risk at this site. It is an artistic rendering of an aerial view of the park that details where improvements will be made. Image two shows how the river in this area looks currently. The water level is low, and the river is constrained by concrete walls along the top of the image. Image three shows a pathway through the area that heads underneath a railroad crossing. While very green, the plants covering the landscape in this image are non-native and detrimental to the health of the nearby ecosystems. Image four is a conceptual drawing of the work planned to reduce flood risk at this site. It is an artistic rendering of an aerial view of the park that details where improvements will be made. Image five is a conceptual drawing of the work planned to reduce flood risk at this site. It is an artistic rendering of an aerial view of the park that details where improvements will be made. Image six is a conceptual drawing of the work planned to reduce flood risk at this site. It is an artistic rendering of a side profile view of the park that details where improvements will be made. Image seven is a conceptual drawing of the work planned to reduce flood risk at this site. It is an artistic rendering of an aerial view of the park that details where improvements will be made. Image eight is a conceptual drawing of the work planned to reduce flood risk at this site. It is an artistic rendering of a side profile view of the park that details where

improvements will be made. Image nine is a conceptual drawing of the work planned to reduce flood risk at this site. It is an artistic rendering of an aerial view of the park that details where improvements will be made. Image ten is a conceptual drawing of the work planned to reduce flood risk at this site. It is an artistic rendering of an aerial view of the park that details where improvements will be made. Image eleven is a conceptual drawing of the work planned to reduce flood risk at this site. It is an artistic rendering of a side profile view of the park that details where improvements will be made. Image twelve is a conceptual drawing of the work planned to reduce flood risk at this site. It is an artistic rendering of an aerial view of the park that details where improvements will be made. Image thirteen is a conceptual drawing of the work planned to reduce flood risk at this site. It is an artistic rendering of an aerial view of the park that details where improvements will be made.

Weir Gulch Park & Channel Improvements – Located towards the top of the screen between West Colfax and Denver on the map. Clicking this hotspot opens an image carousel displaying an initial cover page providing the name of the marker followed by eight images. There are two buttons on the left side of the carousel; the top, denoted by an "I," will bring the user to a text box providing more information on the mitigation work being highlighted by the hotspot. The button below that will mute and unmute the sound. An X visible at the top right of the screen will close the image carousel and take the user back to the main map. Image one shows the gulch during a flood event. The water is rushing past and overtopping a number of stairs and pedestrian walkways. Image two is a conceptual drawing of the work planned to reduce flood risk at this site. It is an artistic rendering of an aerial view of the park that details where improvements will be made. Image three is a conceptual drawing of the work planned to reduce flood risk at this site. It is an artistic rendering of an aerial view of the park that details where improvements will be made. Image four is a conceptual drawing of the work planned to reduce flood risk at this site. It is an artistic rendering of an aerial view of the park that details where improvements will be made. Image five is a conceptual drawing of the work planned to reduce flood risk at this site. It is an artistic rendering of an aerial view of the park that details where improvements will be made. Image six is a conceptual drawing of the work planned to reduce flood risk at this site. It is an artistic rendering of an aerial view of the park that details where improvements will be made. Image seven is a conceptual drawing of the work planned to reduce flood risk at this site. It is an artistic rendering of an aerial view of the park that details where improvements will be made. Image eight is a conceptual drawing of the work planned to reduce flood risk at this site. It is an artistic rendering of a side profile view of the park that details where improvements will be made.

Globeville Landing Park (Park to Platte Project) – Located towards the top of the screen between Globeville and River North Art District on the map. Clicking this hotspot opens an image carousel displaying an initial cover page providing the name of the marker followed by four images. There are two buttons on the left side of the carousel; the top, denoted by an "I," will bring the user to a text box providing more information on the mitigation work being highlighted by the hotspot. The button below that will mute and unmute the sound. An X visible at the top right of the screen will close the image carousel and take the user back to the main map. Image one shows a map that outlines the area that will benefit from flood risk reduction efforts planned. Image two shows a zoomed-out elevation map for Denver with the Globeville area outlined. Viewing the map, it is clear the Globeville lies at a lower elevation than the rest of the city and is a prime candidate for flood mitigation work. The third image shows the proposed area during a flood event. The water level has reached the height of the road along the bottom of the image and in some places has overtopped it slightly. Image four shows the area as it

looks now when the river is running low. This section of the river is very rocky, with most of the river on screen filled in with stones. A pedestrian walkway is visible towards the top of the screen.

Future Plans for Confluence Park – Located towards the top of the screen between LoDo and Five Points on the map. Clicking this hotspot opens an image carousel displaying an initial cover page providing the name of the marker followed by 13 images. There are two buttons on the left side of the carousel; the top, denoted by an "I," will bring the user to a text box providing more information on the mitigation work being highlighted by the hotspot. The button below that will mute and unmute the sound. An X visible at the top right of the screen will close the image carousel and take the user back to the main map. Image one shows how the park looked before any renovations were completed. The river runs through the center of the image and a plaza stretches along the far riverbank. Image two is a conceptual drawing of the work planned to reduce flood risk at this site. It is an artistic rendering of an aerial view of the park that details where improvements will be made. Image three is a conceptual drawing of the work planned to reduce flood risk at this site. It is an artistic rendering of a pedestrian view of the park that details where improvements will be made. Image four is a conceptual drawing of the work planned to reduce flood risk at this site. It is an artistic rendering of an aerial view of the park that details where improvements will be made. Image five is a conceptual drawing of the work planned to reduce flood risk at this site. It is an artistic rendering of what the park will look like when all improvements are completed. Image six is a conceptual drawing of the work planned to reduce flood risk at this site. It is an artistic rendering of an aerial view of the park that details where improvements will be made. Image seven shows how the park looked while under construction during the first phase of planned improvements. The view is from Shoemaker Plaza, which is currently under construction. The water has been temporarily drained from in front of the steps, and several tiers have been completed. Green steel is visible, as it marks where the next set of stairs will be anchored in place. Image eight is an aerial view of construction occurring at Shoemaker Plaza. The water has been temporarily drained from in front of the steps, and several tiers have been completed. Green steel is visible, as it marks where the next set of stairs will be anchored in place. Image nine is a view of the construction around Shoemaker Plaza taken from the other side of the park. The river is running half full, as the other half has been drained to allow for workers to install the large concrete steps. Image ten is taken from the riverbed looking upstream towards the 15th Street Bridge. The water has been temporarily drained, and the user can see anchoring in place to allow installation of additional concrete steps. Image eleven is taken from the now drained portion of the river. This image was taken early during construction and shows the retaining walls being installed before any of the large concrete steps had been laid in place. Image twelve shows how the park looks today with the updated Shoemaker Plaza. The image is taken from the other side of the park looking out across the river. Image thirteen shows the grand opening event for the rebuilt Shoemaker Plaza. The river flows down and around the plaza and out of frame while a large crown of people gathers on the plaza to celebrate the completion of construction.

Harvard Gulch – Located towards the center of the screen between College View and Platt Park on the map. Clicking this hotspot opens an image carousel displaying an initial cover page providing the name of the marker followed by four images. There are two buttons on the left side of the carousel; the top, denoted by an "I," will bring the user to a text box providing more information on the mitigation work being highlighted by the hotspot. The button below that will mute and unmute the sound. An X visible at the top right of the screen will close the image carousel and take the user back to the main map. Image one is taken from just above the river during a flood event. The water courses through most of the

image and has topped both banks. Image two shows the gulch as it looks when dry. Non-native plant life grows over the edges of the concrete gulch, and there is a pedestrian walkway visible towards the center of the image. Image three is a conceptual drawing of the work planned to reduce flood risk at this site. It is an artistic rendering of an aerial view of the park that details where improvements will be made. Image four details the various types of nonstructural flood risk reduction being done at this site. In this image there are several small images, including one titled “Elevation,” which shows a home being put on stilts, one titled “Dry Floodproofing,” which shows a water barrier placed between the entry point to a building and the water, one titled “Wet Floodproofing,” which is an illustration of a house that is designed to flood with minimal impacts to the home, and one titled “Acquisition/Relocation,” which shows a home that has been purchased by a governmental entity being torn down to remove it completely from the flood zone.

Sanderson Gulch Improvement – Located towards the center of the screen south of Athmar Park and west of Washington Park on the map. Clicking this hotspot opens an image carousel displaying an initial cover page providing the name of the marker followed by six images. There are two buttons on the left side of the carousel; the top, denoted by an “I,” will bring the user to a text box providing more information on the mitigation work being highlighted by the hotspot. The button below that will mute and unmute the sound. An X visible at the top right of the screen will close the image carousel and take the user back to the main map. Image one is an aerial view of the gulch before improvements were implemented. The gulch runs through the center of the screen and is surrounded by commercial buildings. Image two shows a square cement opening under a round one that is the current pathway for water through the area. Image three is a closer view of the square concrete pathway for water under the road. The gulch is currently dry in the image, and some graffiti is visible on the walls. Image four shows the opposite end of the current concrete tunnel. The water is mostly stagnant, and there is graffiti on the walls. Industrial buildings are visible at the top of the image. Image five shows the opposite end of the current concrete tunnel. The water is mostly stagnant, and there is graffiti on the walls. Industrial buildings are visible at the top of the image. Image six shows a zoomed-out view of the gulch. The grass on each side of the gulch is overgrown, and there are cars parked on each side.