

Bringing Back the Magic of the River

Bridge to Bridge River to Railroad

**Kennewick, Washington
Urban Design Assistance Team**

December 2003



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A community-wide project dedicated to bringing back the 'Magic of the River'

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Our mission is to reconnect with the Columbia River and to develop the Bridge to Bridge/River to Railroad area into an attractive, economically viable front door to our community.

We will place significant importance on public and private sector input to develop a vision plan and implementation schedule that will create a premier destination riverfront area combining unique gathering places for civic and cultural activities, distinctive shopping venues, welcome living spaces, and enjoyable recreational opportunities for the entire region.

– UDAT Steering Committee

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The Bridge to Bridge/River to Railroad Committee's purpose in bringing an Urban Design Assistance Team to Kennewick was to have this Team provide visioning and planning guidelines together with an implementation schedule for the revitalization of the area located between the Blue and Cable Bridges and from the Columbia River to Canal Drive. This Team Report is the product of many public meetings, a compilation of surveys, concerns and input received from the community, and the Team's visit.

The goal of this project is to create an economically viable, aesthetically pleasing, premier destination riverfront area combining unique gathering places for civic and cultural activities, successful businesses offering distinctive shopping venues, welcome living spaces, and enjoyable recreational opportunities for current stakeholders and the entire region.

While the community and region at large have been fully supportive and embrace the Bridge to Bridge/River to Railroad project, it is the business owners, property owners and residents in this area who will make this revitalization successful. Several of these entities have already created niches that support economically viable, appealing businesses and attractive residential housing.

To be successful, area stakeholders will need to become part of this process through participation, buy-in and support. Their voices will be heard and any potential sale of their businesses or properties to further the vision of this plan will be at a time and price they have freedom to negotiate. This project does not support the concept of revitalization through the use of procedures such as eminent domain, which could potentially be harmful to area stakeholders.

This vision plan is a well-prepared, \$200,000-plus gift to this community from the Urban Design Assistance Program. But it remains a vision, not a final blueprint to be followed to the last detail. Like the raising of a child from birth to maturity, this plan needs to be nurtured and corrected to meet changing situations as they arise. Yet it must never lose sight of the ultimate goal and vision of reconnecting our community to the economic and aesthetic magic the Columbia River provides.

Skip Novakovich
Chair, Bridge to Bridge/River to Railroad Committee
Community Coordinator, Kennewick Urban Design
Assistance Team Visit



View looking east towards cable bridge from Clover Island Inn

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Sometime after steamboats stopped running up and down the Columbia River, Kennewick turned inland. Attention to the river shore and the activities it sustained was forgotten. There was a time when the mighty Columbia supplied all the necessities for life – first among native peoples, then explorers, ranchers, traders, and farmers. But the speed at which 21st century technology provides goods and services has negated the “necessity” of the Columbia except for large commercial shipping ventures. The River is now mainly used for recreation, but the river shore itself remains largely uninviting...

Introduction

A Steering Committee formed of the Downtown Kennewick and Columbia Drive Association (DK&CDA) and the City of Kennewick brought the Urban Design Assistance Team to Kennewick with the mission of developing a plan for reconnecting Kennewick to the Columbia River. Prior to this, the DK&CDA had completed a revitalization plan for the downtown area extending from the Columbia River south to 10th Ave and from Highway 395 east to Gum Street. The Kennewick Downtown Revitalization Strategy was developed to create a vision of a viable downtown center and recommendations to achieve it. This plan has resulted in projects such as façade restoration and public art, and a Main Street Program has been implemented.



Aerial photo of the Bridge to Bridge/River to Railroad area

At about the same time, the Port of Kennewick began an ambitious redevelopment plan for Clover Island. Once the strategies for the Central Business District and the Clover Island Plan were underway, it became apparent that what was still missing was the connection of Kennewick to the Columbia River and the integration of these other two elements. It became clear that Kennewick needed a concept for the area lying between Clover Island and downtown because it would be the vital connection to the river tying these areas together. All parties recognized the need to reconnect the downtown area with the river to maximize the potentials the area holds.

To implement this idea, the President of the DK&CDA, Skip Novakovich, contacted the Chair of the Urban Design Assistance Team program, Peter Batchelor. Peter visited Kennewick in October 2002 to make a preliminary evaluation of the merits of the city's application. An agreement was reached in December 2002 to bring the UDAT to Kennewick to focus on the Bridge to Bridge/River to Railroad area. Financial commitments to support the UDAT were received from the City of Kennewick, the Port of Kennewick, the DK&CDA and Ben Franklin Transit.

The Steering Committee, with a number of task teams consisting of Kennewick and Tri-Cities residents and business people, was established to assist the UDAT. Local firms provided the equipment and facilities, logistical support and other items needed by the Team for the week-long workshop. They also organized and carried out several public events for the Team to gain public input before and during the UDAT workshop.

This report is the product of the UDAT workshop, presented by the Team to the Steering Committee as a plan and implementation program for bringing back the magic of the river for the community's benefit.

Preface

The first of several visits to Kennewick occurred for me on October 31, 2002. Children and adults on Kennewick Avenue were wearing colorful masks and costumes. Storefronts were decorated for Halloween, and the air was sweet with the scents of apples, cinnamon and autumn leaves. Closer to the river along Columbia Drive eighteen wheelers rumbled past car dealers, appliance stores, and a great variety of businesses. The sun shone brightly on the town during this festive occasion, while the sounds, smells and colors captured the promise of family and hearth in the holidays ahead.

The next morning I awoke to a view of the Columbia River under a deep azure sky and a Fall morning chill. Translucent strands of mist swirled off the river, creating ever-changing patterns of light. The entire river surface was like a crystal plane, woven into strands of diamonds constantly twisting and turning in the early morning sunlight. Later in the day I stood on the levee and studied the reflections of the two bridges. Traffic could be heard in the distance, but for the moment there was an air of peacefulness that only a wide and deep river can engender. Downtown Kennewick seemed far away and detached from this grand vista.

During this visit I came to understand the major problem facing Kennewick: as a town it had turned its back on this great river, and was unable to incorporate into its daily life the beauty of the river's constantly changing identity. Over the course of the next year I saw the river under winter, spring and summer skies; in early morning sunlight, under the flat color of noon light, and in the purple and violet landscapes of sunset and dusk; under mildly blowing winds and in the turbulent wake of hydroplanes. This then was the basic problem: how to reconnect the town with the river and bring its magic back into the lives of Kennewick's citizens.

Urban Design Assistance Teams have been helping America's communities solve difficult problems – sometimes seemingly intractable ones – for the past thirty-six years. Teams have visited communities ranging in size from a few thousand to several million persons. My first experience with an Urban Design Assistance Team occurred thirty-four years ago. I was able to help save a vital historic district from destruction by an interstate highway system. Since that time I have devoted my energies to building the Urban Design Assistance Program, first within the State of North Carolina and spreading more recently to Maryland and Washington State.

Urban Design Assistance Teams are comprised of volunteers drawn from a variety of professions: Architecture, landscape architecture, city and regional planning, civil engineering, and related social and economic disciplines. Team members volunteer their time, giving up at least a week of professional practice for a community they have usually never visited.

Team members are selected on the basis of their skills and knowledge of the problem to be studied. It is not uncommon for a team to possess 200 years of cumulative professional experience. Over the years, teams have generated hundreds of millions of dollars of investment in communities, and have left a legacy of active local organizations with their own newsletters, web sites and all the other attributes of civic involvement.

Patric Dawe, AIA, AICP, assembled a skilled and dedicated team for Kennewick. The graciousness and hospitality of the community towards the Team was overwhelming. The level of organization of its steering committee has raised the standard for active citizen participation for all future teams sent to American cities.

We know we have altered the destiny of your community; it will be in our hearts and minds forever. We've done our job. It is now up to you to guide this community towards a future of economic, social and cultural fulfillment.

Peter Batchelor, FAIA, FAICP
Director, Urban Design Assistance Program



Vision of the Future— Image of Kennewick and the River in Twenty Years



*Restore Columbia River Habitat
Variety of Trails*



*Infill Bosque of Trees to Define
Urban Form and Support Business
Development*



Integrated Uses w/ Riparian Habitat

<i>Residential</i>	<i>Fishing</i>
<i>Restaurant</i>	<i>Boating</i>
<i>Trails</i>	<i>Birding</i>

As the center of Tri-Cities and Mid-Columbia tourism, the area known as Bridge to Bridge/River to Railroad jumps with activities day and evening. It's where tourists start when they're visiting wineries or when they're visiting the industrial or cultural heritage sites in the area. Boaters moor at Clover Island and walk through the area where there's plenty to see and do.

The riverfront—that's changed a lot. The old levee is gone, replaced by a wonderful natural shoreline, backed by a new line of flood control banks, integrated with new development sites. We didn't start with that; we first lowered the existing levee and worked hard to coordinate new development behind the levee, while building a natural riparian wetland to feed Duffy's Pond.

From the city, we can see the river. We can easily walk and drive to it, park there and spend time right by the river. Best of all, when we get to the river edge, there are things to do for everyone. There's swimming at Kennewick Beach, in the elbow of Clover Island. We can walk our dogs on the pathways along the river. We can explore the riparian wetlands behind the new levee. There are places for more of us to moor our boats while visiting, eating or shopping.

It's fun to walk to the river. Streets are lined with shady trees echoing the historic farm roads nearby. As we walk along the new levee park, which is part of the 26 mile biking and walking trail, we see and learn from the historic markers. Next month the Lewis & Clark Marathon once again attracts runners from all over the world to this unique marathon course.

From the walkway, we can see the new riverside residential communities that have been built since the UDAT in 2003. They have replaced the former industrial and trailer park environment.

The railroads have been consolidated so that a full two blocks of new development have been created across the downtown. Now, small hotels, businesses and mixed uses enliven our downtown. And it's all connected to a fun, exciting riverfront that's a focus not only for Kennewick but for the whole

Tri-Cities. We have finally captured the magic of the river by reconnecting with it.

Phase 1

The first phase of improvement is to lower the existing levee by approximately six feet and to top it with a bike and walkway trail.

Phase 2

With the lowered levee still in place, public and private projects take place behind it, keyed to the open space, wetland and trail system south of the levee. New residential and commercial projects are envisioned between downtown and the river. Columbia Drive would be re-aligned at Fruitland to make room near the levee for more future development. Clover Island redevelopment would take place according to the Port of Kennewick master plan. At Duffy's Pond and along the new open space, new projects facing the water are built to levee standards so that the levee may later be removed.

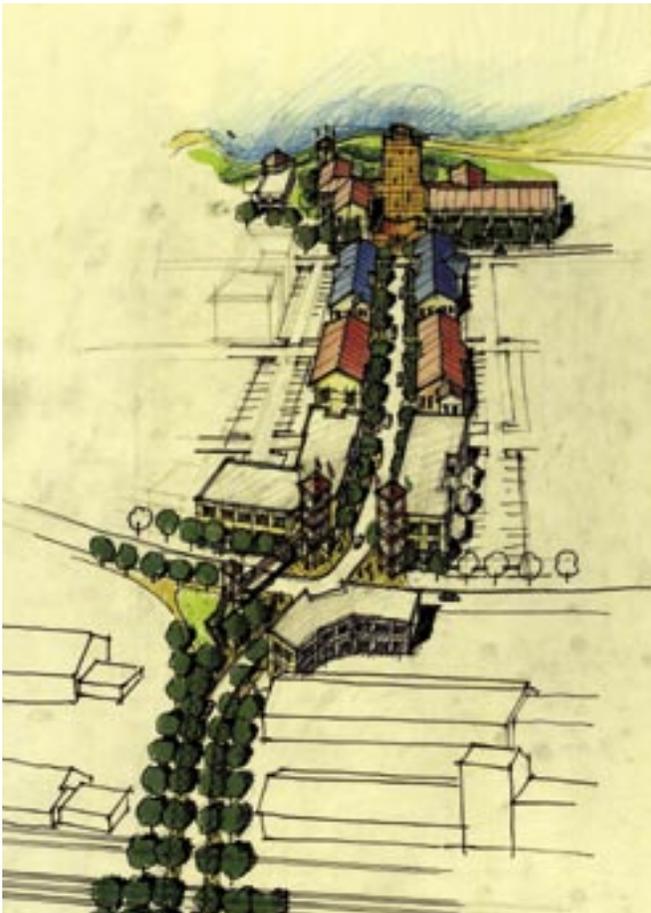
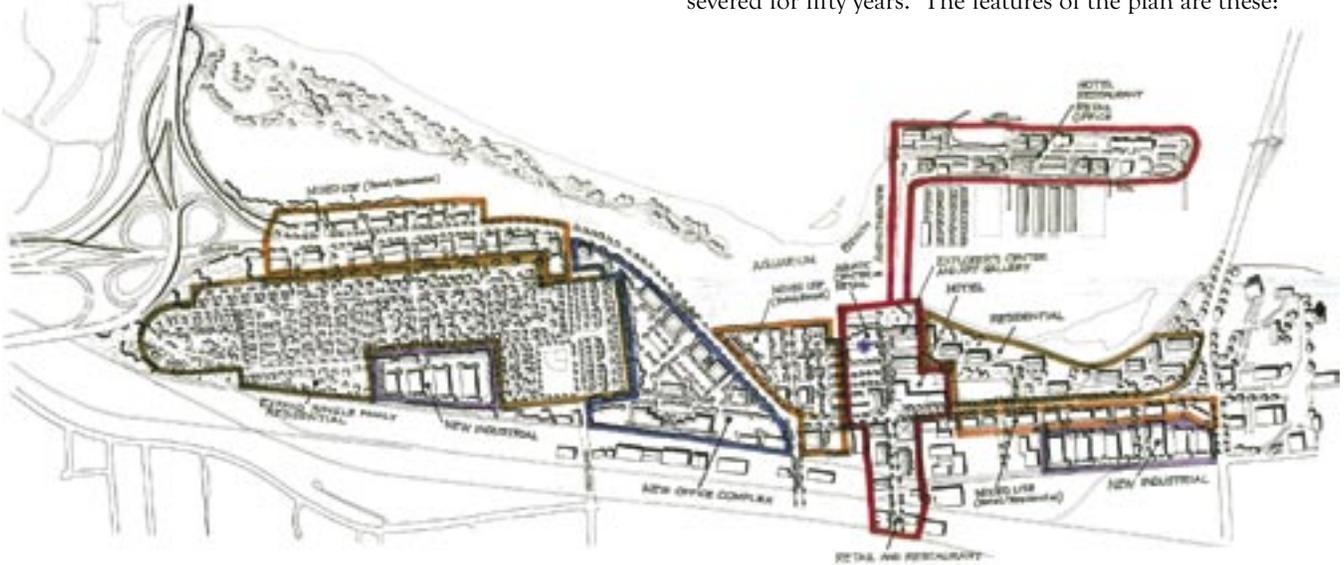
Phase 3

As the new protective levee line is established by new development, the existing levee would be removed and a new shoreline built in its place, providing for new recreational, residential and commercial attraction opportunities. Duffy's Pond would be open to the river, and Clover Island would become more integrated with the new shoreline. The open space and connection to the river create higher land values along the river and a great new set of visitor opportunities for Kennewick.



Executive Summary

Kennewick can reconnect itself to the Columbia River by following the roadmap to public and private initiatives in the Bridge to Bridge/River to Railroad (B2/R2) master plan. The Plan is a visionary yet very realistic one for revitalizing the area and establishing connections with the river that have been severed for fifty years. The features of the plan are these:



View of Benton Street

Create access to the Columbia River.

The most important features are the physical connections that will be made for vehicles and pedestrians to the river's edge where new activities will be developed. Being able to see the river is very important in Kennewick, so we will create visual corridors and opportunities to get out and see the river. We will connect Downtown Kennewick to the river along Washington, Benton and Fruitland Streets.

Make the area an important center in the Tri-Cities and the most important focal point in Kennewick.

Bridge to Bridge/River to Railroad will be the place to be in Kennewick for recreation on the river. For boating, running, sitting and watching, relaxing or dining, we'll go there, to places such as the new beach at Clover Island. This will be the place where we bring our relatives from out of town to learn about the region's attractions, whether they want to golf, go on a winery tour, see the Unlimited Hydroplane Races or attend a festival—a place to start in the region.

Develop a real, authentic place in the B2/R2 area.

The more people travel, the more they seek the genuine places that speak to them of the unique identity, history and people of those places. Rather than franchises and strip malls, visitors will find special, one-of-a-kind stores, shops, restaurants and neighborhoods that convey the historic character of Kennewick. The industrial buildings have a unique role to play in creating this character, and they will become focal points of this unique part of the river.



Residential Development at Duffy's Pond



Washington Street Site Plan

Use the historic assets in the area. The grain elevators, the giant cranes, the Cable Bridge, the individual downtown buildings and other industrial buildings, and the railroad bridge are all part of the ambiance of downtown, making it different than anyplace else in the Tri-Cities. We believe people will want to experience these things and that they enhance the visitor experience. The plan makes it easy to experience them. The plan envisions completing the Heritage Trail along the river, by running it along the levee, where bicyclists and pedestrians can enjoy an outing and visit to Kennewick.

Preserve, enhance and restore the natural environment. Duffy's Pond will be enhanced as a natural wetland area accessible to the Kennewick community. Salmon habitat will be increased along with walkways and access to waterways in the area along the land side of the levee, beginning early in the implementation of the plan. A system of circulating river water through Duffy's Pond will make it more effective as a habitat, and a cleaner environment for all of us, including the wildlife. The levee itself will ultimately be transformed into a natural shoreline with places to fish, walk, or just enjoy the river edge as it once was, accessible to all.

Provide appropriate opportunities for residential and commercial upgrading and new development.

As upgrading of the area proceeds, there will be opportunities to likewise upgrade the quality and the mix of housing and commercial uses in the Bridge to Bridge/River to Railroad area. As there are quality residential neighborhoods in the area, there likewise are sub-standard conditions in both residential and commercial areas, where upgrading is important, both for the health, safety and welfare of the residents, and also to create the conditions for revitalization to take place.

Capture more of the boating business from the river.

Clover Island will be a draw for boaters from up and down the river, because not only can they tie up at Kennewick, they can reach all kinds of attractions just a short walk from the pier. For the first time in fifty years, boaters will be able to see Kennewick from the river, as the city is developed with a variety of attractions along the riverfront. What would have been a short stay to fuel up can turn into an afternoon and evening, even an overnight stay at Kennewick.

Change the image of the area. New gateways will signal new entries into downtown, changing our first impressions for the better. New housing, new businesses, tree planting, sidewalks, signs of revitalization and a new sense of connection with the river will go a long way toward persuading people to come back again and again to a truly unique mixed-use area on the river.

Make it fun! We will all find fun things to do in the Bridge to Bridge/River to Railroad area. Programs for recreation, culture, the arts, entertainment, and dining will be there. We'll want to take our families to the new Beach at Clover Island, where we can swim in the river. We can see the fish, we can get an ice cream and watch people water ski, we can

Kennewick, Washington— A Mid-Columbia City



Kennewick is part of the Tri-Cities—Kennewick, Richland and Pasco, at the big bend of the Columbia River—the Mid-Columbia. Kennewick has a population of about 50,000 and is located on the Columbia River, which is over half a mile wide at this point. This is the dry region of Washington State, the center of wine-producing country. The winters are mild and dry, with hot and dry summers. The “west-siders” of Washington State come over to escape their wet, cold winters, to play golf and enjoy the sun.

The riverfront is small and the town is compact. The town’s imagery is rich with small scale Americana—the same attributes of the sagebrush and tumbleweed character that western inland towns possess from California to British Columbia. The community and region have a rich human history—Kennewick Man, the later Native Americans, Lewis & Clark (this year begins the Bicentennial of their expedition to the Pacific through this area), the early settlements, and the Hanford Site near Richland, begun during World War II.

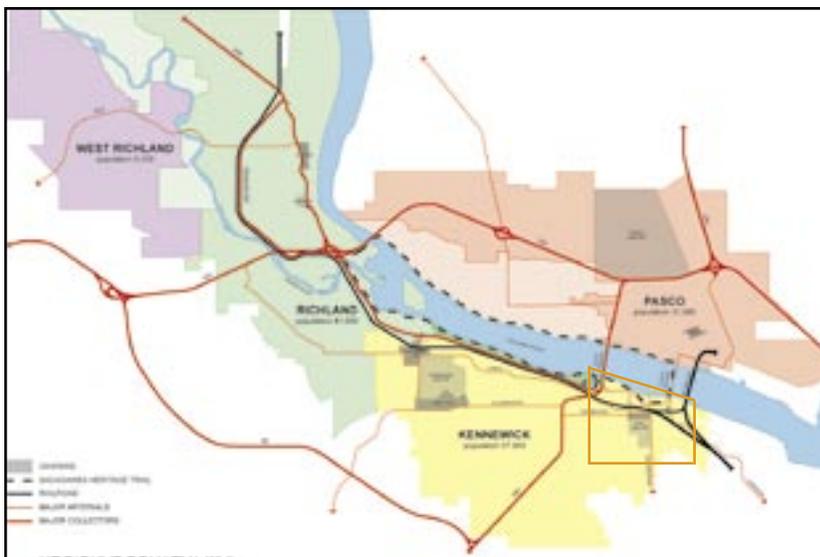
The Problem

The problem to be resolved is how to reclaim the riverfront for improved and better uses, and reconnect the community to the river. The communities along the river once had direct visual and physical access to the Columbia River, making riverboat commerce a lifeline. Columbia River flooding prompted the U.S. Army Corps of Engineers to erect levees directly in front of downtown to control flood waters in conjunction with Grand Coulee, Bonneville and other dams. Downstream, McNary Dam on the Columbia River created Lake Wallula near the Tri-Cities in 1953.

Kennewick’s downtown is several blocks from the riverfront, and other mixed uses have been developed between

Downtown Kennewick and the River. The Columbia River, although at the town’s front door just blocks away, can’t be seen from Downtown, nor is it easy to get there.

But several factors have changed, making riverfront activation a real possibility. The levees do not need to be as high as they are now—lowering them has the approval of the U.S. Army Corps of Engineers. Just west of Downtown Kennewick, Columbia Park has no levee at all. Downtown Kennewick has a revitalization plan, and at least two local organizations are interested in improving the functional and visual connections to the river. The Port of Kennewick is an active player in the area, as Clover Island, connected to the riverbank directly in front of downtown, is being planned for redevelopment.



Community Assets

Kennewick has a myriad of positive attributes as the community moves forward to implement the Plan.

The Rivers

The most obvious physical advantage is Kennewick's proximity to the confluence of the Columbia and Snake River systems. It provides a valuable transportation resource presently utilized by commercial barge and recreational transport. Watercraft can traverse the eight dams strategically placed between the Pacific Ocean and Lewiston, Idaho. Kennewick lies halfway along that journey and provides a natural stopping off point. Facilities such as transient moorage, fuel, boat repairs and launches, restaurants, groceries, and transportation access to other activities are extremely important to encouraging these layovers. The relatively flat land immediately adjacent to the Columbia River has promise for affordable construction of a variety of uses. The area just behind the levee has a fully developed utility infrastructure available including electrical, water, sewer, cable and high-speed internet access, reducing future development costs.



Panoramic look at the levee between the Blue Bridge and the Cable Bridge

The Highways and Attractions

Another great asset is the access provided by State Highways 395 and 397 on the west and east ends of Columbia Drive. This provides direct access for businesses to ship and receive goods. The Civic Center and a number of public buildings are located within a mile of the area. These include City Hall, the Post Office, school administrative offices, Police and Fire Department, Kennewick General Hospital, Senior Center, Library, Lampson Stadium, Fuller Auditorium, East Benton County Historical Museum, Columbia Industries sheltered workshop, Kennewick Irrigation and Columbia Irrigation headquarters, the Port of Kennewick, the Tri-City Herald, and several publicly funded senior apartments. Their visitors and clients combine with the large number of employees to provide an excellent customer base for retail business.

The Climate

The moderate year-round climate with little precipitation provides a tremendous draw for retirees and outdoor enthusiasts. Activities include boating, fishing, golfing, biking, hunting and team sports, most of which can be done year-round. The area is adjacent to Columbia Park, which provides several miles of shoreline access, and is the location of a number of outdoor events drawing regional attendance. The annual Unlimited Hydroplane Races draw several hundred thousand race fans for the week-long event. Clover Island provides boat moorage and services for local and transient boaters. Some of the distinctive landmarks include the Cable and Blue Bridges, the Lampson Building, and the Downtown Kennewick Historic District.

Social Advantages

Kennewick has been a melting pot for families from throughout the United States because of the Hanford Project. The original residents were farming families with their strong constitutions, appreciation for historical ties and conservative nature; many of the original family farms continue in operation today. This influence is evidenced by the history of volunteerism shown in a number of projects completed over a course of fifty years. Kennewick General Hospital, the Playground of Dreams, the Family Fishing Pond, First Night® Tri-Cities, the Tri-Cities Cancer Center, Habitat for Humanity, the Hospice House, the Carousel and many smaller projects have been the result of local residents getting together to fulfill a dream.

Kennewick has a relatively youthful population (bi-county) with less than 20% of the relative population over 55 years of age, although greater numbers of retirees are moving here to enjoy the low cost of living, climate, recreation, and medical services. The workforce is highly skilled and educated. A recent movement towards a greater appreciation for history and the arts has resulted in a number of the older homes and buildings being purchased and renovated. A Public Art Program has been initiated with five pieces of public art commissioned and in place. Kennewick's Centennial is underway, poised for a 2004 celebration with great participation from local residents and businesses.

Business and Finance

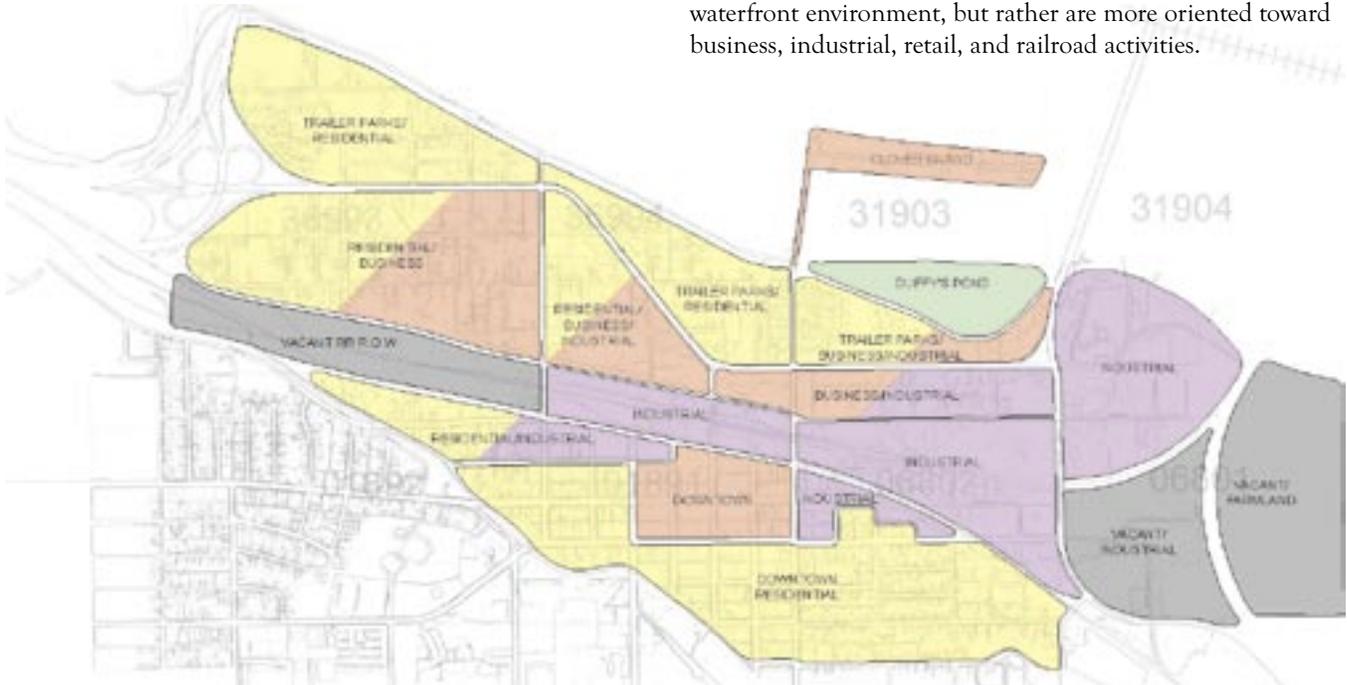
Financial resources are also available to assist with various aspects of the Plan. Kennewick is the retail capital of the Tri-Cities and the Downtown Kennewick shopping district is one of the top three shopping centers in Benton County. Several established and well-known businesses have made their headquarters in downtown, including Lampson International, Welch's, Apollo Inc., Kennewick Industrial, Tri-City Herald and Washington Hardware.

Welch's recently decided to remain in Kennewick, thereby saving 140 jobs in addition to over 20 jobs for developmentally disabled persons. A number of small business incubator facilities available in the area are filled to capacity. Economic development is an ongoing emphasis by city government, which has identified the downtown area as one of five areas of concentration for redevelopment.

The Tri-City Industrial Development Council, the Tri-Cities Enterprise Association and the Port of Kennewick are regional agencies that operate a variety of programs to recruit and preserve business. The City and the Downtown Kennewick and Columbia Drive Association have joined forces to create a Downtown Revitalization Strategy. The plan was introduced to revitalize the area following the Main Street Program. The success of this program is apparent in the number of remodeled buildings, streetscape improvements, new business, new residential opportunities and a lower crime rate.

Existing Conditions

Kennewick has developed according to a distinct pre- and post-flood (1948) pattern. After the levee was established in 1953 to protect the shoreline from future flooding, a variety of mixed land use areas evolved in the area between the downtown and the river, which the UDAT has addressed as the Bridge to Bridge/River to Railroad area. In general, the conditions here range from well-kept and well-used to under-maintained and underutilized. In addition, some of the existing uses do not seem to be associated with a revitalized waterfront environment, but rather are more oriented toward business, industrial, retail, and railroad activities.



Existing Land Use

Residential

Small pockets of single family homes are located in a pleasant neighborhood south of Columbia Drive to the railroad tracks. On the east side of the 395 interchange, multiple trailer parks and small WWII era homes co-exist. These residences are older and have been largely unimproved.

Industrial

A band of industrial uses runs from east to west along the railroad corridor in the southern edge of the B2/R2 area. The eastern end of this swath connects to Gum St. where large-scale industrial use takes over.

Railroad Right of Way

Currently five trains go through the B2/R2 area each day. That number is expected to increase threefold in the next five to ten years. Though the trains are noisy and their frequency will increase, the Team felt that the railroad was not an impediment to the successful revitalization of Downtown Kennewick at this time. In fact, the railroad played a big part in Kennewick's past, and the Team felt these types of histories should be preserved.

The Team recommends working with the railroad to develop complementary businesses along the railroad corridor and encourage heavier industrial users to locate near Gum St. at the eastern terminus of Columbia Drive. If successful, this would reinforce the railroad corridor and, with supplemental street improvements, could greatly enhance the area.

Retail/Commercial

Service-oriented retail and commercial businesses run the length of Columbia Drive, from the Highway 395 interchange to the Cable Bridge. These services are more industrial on the east side of the area. Pedestrian-related retail uses are located to the south, in the downtown area surrounding Kennewick Ave.



Washington St. looking north towards the Columbia River



Washington St. looking north at Columbia Dr. intersection



On railroad tracks looking west toward Benton St.



Intersection of Benton St. and Canal Dr., looking north



Looking south from corner of Auburn St. and Canal Dr.



Duffy's Pond

Current Projects/Improvements, Programs

Several local projects and programs are currently underway by both public and private sectors that will reinforce and enhance the proposals of the Plan. These include:

- Clover Island improvements include new marina facilities, housing, public access and retail space.
- The U.S. Army Corps of Engineers has agreed to lower the levee by six feet. On top of the lowered levees a bike/pedestrian path will be constructed to complete the Sacagawea Heritage Trail that encircles the Columbia River/Tri-City area.
- The Columbia Point South mixed-use waterfront development in Richland is well along and has created public support for riverfront life.
- A new connection between Highway 397 south of Kennewick at Finley and Interstate 82 will be constructed in 2004-2005. This road will divert a significant amount of truck traffic off Columbia Drive while bringing in new opportunities for tourists to enjoy traveling into the Downtown Kennewick area.
- Widening of Highway 240 extending from Kennewick to Richland and widening the highway from Pasco to Walla Walla will make access to Kennewick easier.



View from Columbia River looking south towards the windmill farms on the Horse Heaven Hills

Several other public projects should spur further development in Kennewick. A Convention Center is currently under construction in the Vista Field area which will adjoin the Tri-Cities Coliseum. An Arts and Entertainment District will be developed in this area to appeal to the tourism market. The Southridge Project is a new planned development that will include a tournament sports complex and recreational vehicle park. This development will create additional visits to the region by sports enthusiasts.

Other tourism attractions include the Lewis and Clark Trail Bi-Centennial, Columbia Park Improvements including a new Veterans Memorial, a new Public Art Program, which has produced five new pieces of public art and the introduction of artistic elements planned for infrastructure projects.

Other activities indicative of local commitment include a new Code Enforcement Program, which the City of Kennewick recently implemented to improve the area, with new housing starts at record highs. The City is considering the construction of a new Public Safety building, a new senior center/community center and an aquatic center. The Kennewick Irrigation District, the Tri-City Herald, Apollo, and Overturf Motors have all recently chosen to remain and construct new facilities in downtown.



Current Look of Levee

The Levee

Discussion of the Plan starts with immediate levee improvements and continues with longer-range plans. These improvements are appropriate, because the work on the river edge sets the stage for everything that follows.

The levee is the key challenge in reconnecting with the Columbia River. It is necessary for flood control, but severely inhibits public enjoyment of the features the Columbia River could offer. With appropriate protection, the south side of the levee could be enhanced with new recreational, residential, and commercial uses. Through creative planning, the levee could be used in more positive ways.

Because of the UDAT's charge from Kennewick to reconnect the community with the Columbia River, the Team focused substantial attention on the issue of the levee. Knowing that a plan to lower the levee is being discussed, the Team considered that the logical starting point for action. The discussion then centered on additional options that could be undertaken by the community in the future, with the object of achieving a broader range of benefits from the proximity to the river shore. The levee improvement options that were evaluated with the assistance of engineering staff from HDR Engineering's Pasco office are these:



Option 1: Retain & Lower

Option 1: Retain the Levee / Modify Height

This is the existing scenario among community planners and the U.S. Army Corps of Engineers, and includes lowering the levee by six feet. This height would keep sufficient freeboard to protect property from the Standard Project (1000 year) flood. By taking advantage of the potential for lowering the levee by six feet and thereby widening its surface, a walking trail and bike path could be constructed along its length, connecting it to the Cultural Heritage Trail.



Option 2: Retain & Restore

Option 2: Retain the Levee / Riverfront Restoration

This option includes adding some habitat restoration along the south side of the levee, with wider surface area on top for pedestrian traffic, with additional water park features. This option also includes plans for additional land development.

Option 3: Modified Levee / Bring the River In

This option would involve moving the levee inward, creating a more natural riverbank, and adding a breakwater between Duffy's Pond for passive pedestrian water recreation (paddle boats and canoes, for example).

Option 4: Modified Levee / Riverside Drive

This option builds on Option 2, moving the west side of the levee inward to create a park-like setting. It includes the addition of a beach near the existing Washington St. entry to Clover Island, and introduces a road on top of the levee.

Option 5: Fully Modified Levee / Columbia Riverfront Drive

This option moves the levee inward significantly, with a wetland environment fronting sloped development and with a water edge of appropriate height for adequate flood control. It includes redesigning Duffy's Pond to support wetland and habitat restoration, while the old levee would provide islands for water recreation.

Levee Recommendations of the UDAT

These options present the scope of ideas. The UDAT believes the most feasible, and ultimately most valuable scenario would be to implement Options 1, 2, and 5 in a phased approach.

Option 1 would be done first, because it is already in the planning stages, has broad support, and could be done with a minimum of funding and time spent to complete. Having accomplished this, a logical next step would be—

Option 2, which would create a parklike setting and open spaces behind the lowered levee, enhance the value of the adjacent property, and encourage appropriate development along Columbia Drive. Once this is done—

Option 5 would complete the transition with sloped properties developed in an incremental fashion along the water to take the place of the existing levee, and the existing levee replaced with a naturalized shoreline of islands, inlets, protected areas for wildlife species including salmon, and recreation areas contacting the water.



Option 3: Modify - Bring River In

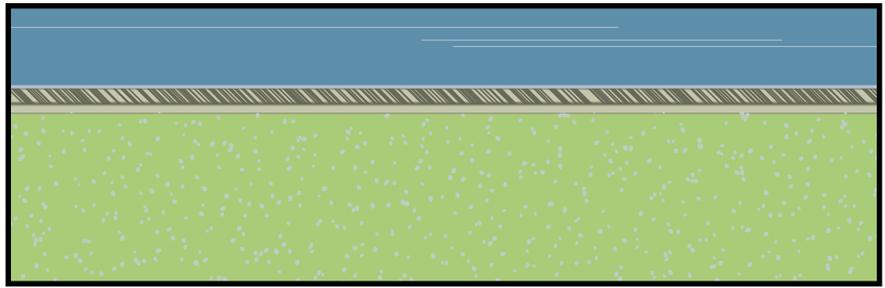


Option 4: Modify - Riverside Drive

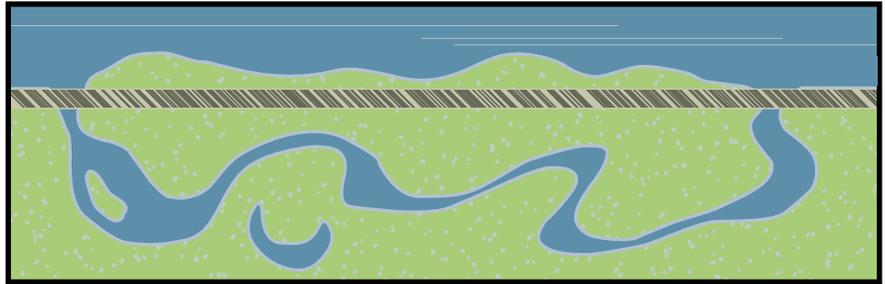


Option 5: Modify Columbia Riverfront Drive

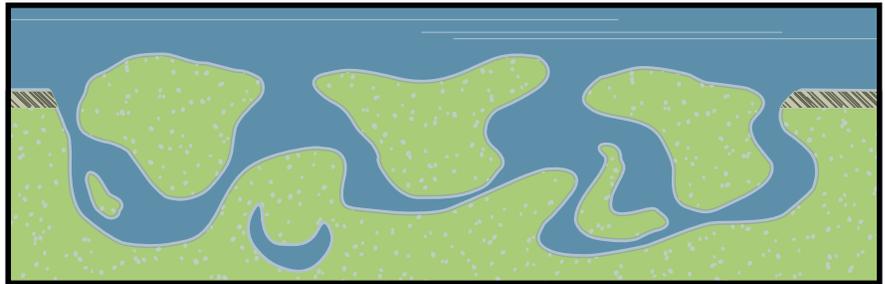
Phase 1:
Lower the levee and develop
trail on top



Phase 2:
Keep levee in place while developing
open space. Development behind
levee becomes river barrier.



Phase 3:
Remove the levee and complete open
space / wetland trail system with new
river levee created by development.



Continuing with the phased approach, a wetland habitat would course along south of the levee, with pedestrian trails along the top. The final phase for the levee would involve the construction of commercial (professional) and residential (condominiums/apartments) facilities whose sites would serve as the levee itself, significantly enhancing property value along the Columbia River and continuing to protect inland property. This approach would include a relocation strategy for existing property owners and residents.

It is important to note that improvements and changes of this magnitude should be subjected to thorough investigation and discussion with property owners and the community, utilizing appropriate expertise to ensure that the public health, safety and

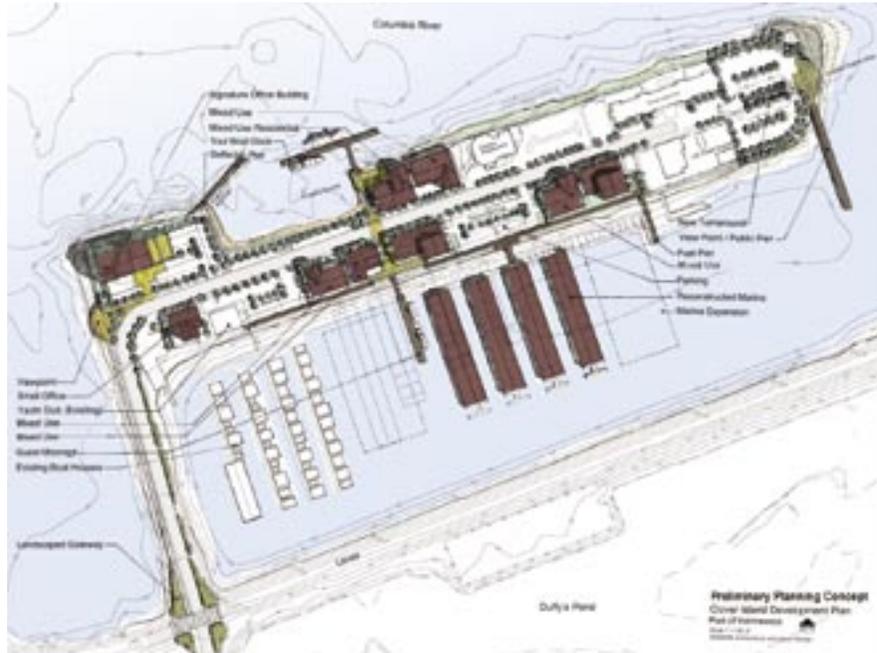


Kennewick's Levee Future Potential

Clover Island

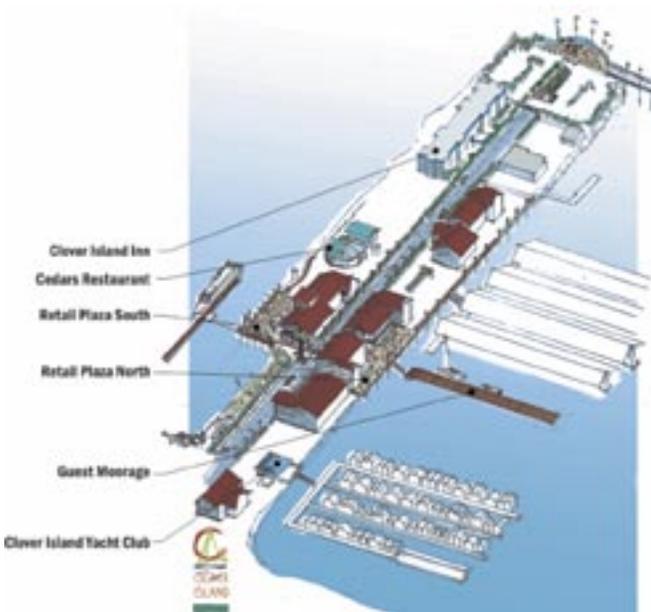
Because of the existing location and amenities of Clover Island and the enhancements already in progress, the UDAT Team felt it was another excellent starting point for revitalization. The island is within walking distance from downtown, but is currently not well connected, nor is the walk very interesting. Because of these conditions, the distance between the island and Downtown Kennewick seems much greater than it really is.

A Clover Island redevelopment plan is in the review and approval stages. This presents a fortuitous event on which to build plans for knitting Clover Island into the mainland. It is currently the only place in Kennewick besides Columbia Park where the city can come to the Columbia River.



Site Plan
Source: Makers Architecture & Urban Design

The project principal and a designer from Makers Architecture and Urban Design assisted the UDAT Team during the workshop to weave the Clover Island Master Plan into the Bridge to Bridge/River to Railroad UDAT plan. The UDAT Team felt that there was a great deal of consistency between the Clover Island and UDAT plans, and the Team endorses the plan's proposals.



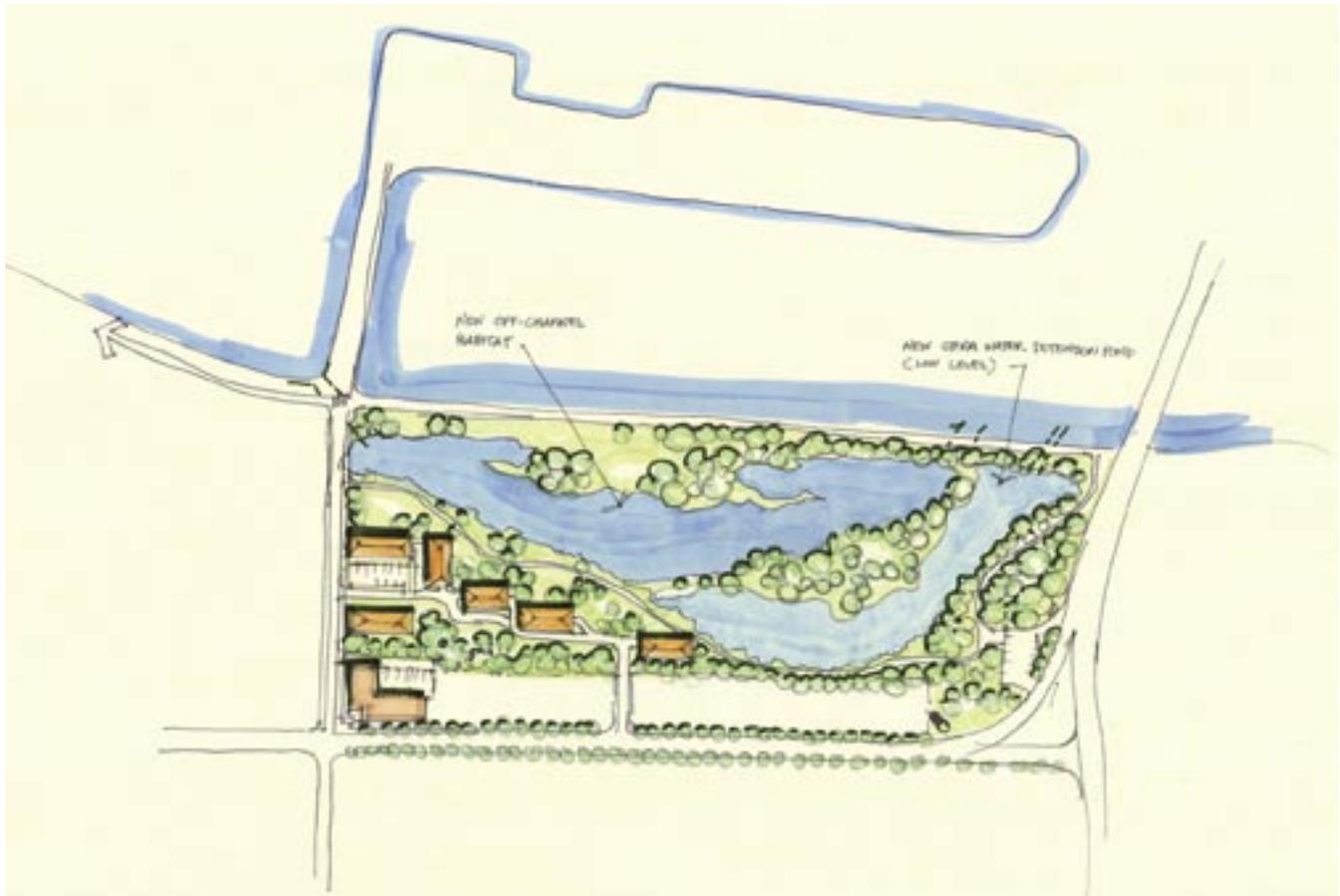
The Clover Island Master Plan aims to activate this part of the Columbia River by improving several aspects of Clover Island. The plan features enhanced settings for several existing tenants, reuse of existing parking areas, retention of the boat ramp, retention of the Clover Island Yacht Club, expansion of the existing marina, and retention of the U.S. Coast Guard station. Proposals include new retail, residential and mixed-use buildings, new landscaping, additional parking, and new public access components and amenities including a landscaped pathway around the island, a structured boardwalk, a public plaza, river viewpoints, a water-accessible shoreline and a community meeting facility.

Public Spaces and Special Features

Kennewick Beach, not a part of the Clover Island Master Plan, has been added by the UDAT Team to the upstream side of the causeway, as a recreational amenity and a means of eliminating predator habitat by easing the curve of the

Habitat Restoration

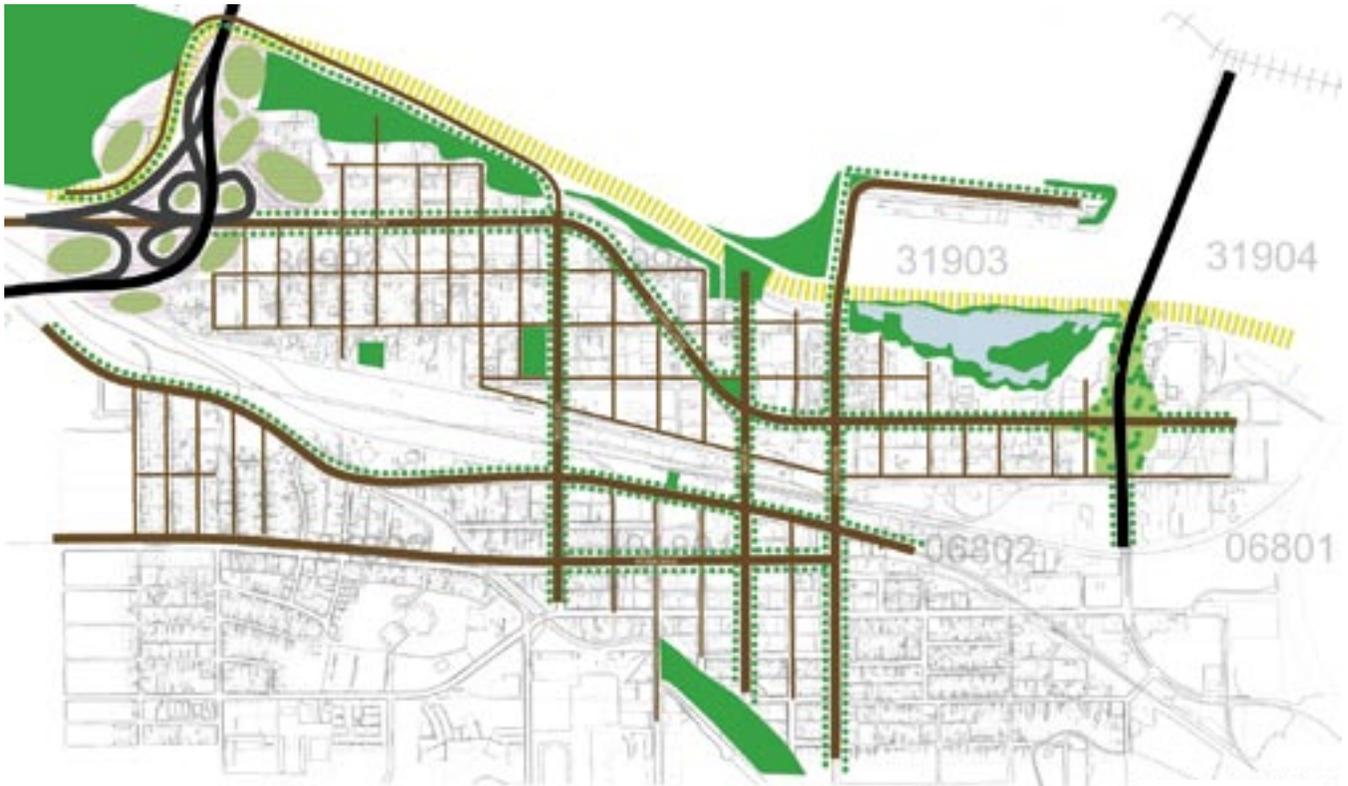
Duffy's Pond plays a big role in stormwater retention, as water collects there and is pumped up and into the Columbia River. This open space feature could be much more accessible to wildlife and people. The natural area is envisioned as a ponded area with environmental enhancement for wildlife and carefully considered access by people to experience the open space while protecting the wildlife.



Plan of Duffy's Pond Area

Circulation

To make it simpler to get to and around the B2/R2 area, as well as improve the aesthetics of the existing routes, the Team arrived at a number of recommendations, including the following:



Circulation

Upgrade Columbia Drive

This thoroughfare currently presents an unattractive and uninteresting streetscape, filled with predominantly industrial and commercial buildings. Additionally, Downtown Kennewick is not visible from Columbia Drive, so visitors to Kennewick might miss it entirely—it is difficult to access at present. The Team feels that Columbia Drive could be used in a positive way to obtain access to Downtown Kennewick and the Columbia River through enhanced lateral connections, as well as a more aesthetic east to west thread to reach Kennewick's two gateways at the Cable Bridge and Blue Bridge.



Columbia Drive Looking West



Columbia Drive Streetscape



Washington Street Looking North



Development Potential

Some possible improvements for Columbia Drive include:

- Give Columbia Drive the character of an urban drive as opposed to a state highway, with improvements that would balance the amenities for pedestrians and drivers, while improving the appearance of the street.
- Use parallel parking on the east end to widen sidewalks.
- Plant trees for better visual appeal and to provide shade for both pedestrians and business owners.

Strengthen the North-South Corridors

The corridors include Washington, Fruitland and Benton Streets. Along these corridors, the UDAT Team proposes that Kennewick improve connections for better access to the River with pedestrian-friendly streetscape—trees, lights, pedestrian-friendly railroad crossings and occupied uses along the streets.

Washington St. is a great place to start, because it already runs from Downtown Kennewick to Clover Island. It needs better pedestrian connections across the railroad property, and tree-lined sidewalks (like ones that are presently existing alongside the trailer parks on Clover Island Drive north of Columbia Drive). Alongside Washington as it connects to Clover Island would be the integration of a beach near the Clover Island entry.

Fruitland Street, similar to Washington Street in traffic volume, could connect to a new Park Exit Road. This would provide access to a meandering path south of the levee devoted to natural restoration habitat. On Fruitland, streetscape improvements would improve the connection and aesthetic quality between Downtown Kennewick and the Columbia River shore.

Benton Street currently has a very rough pedestrian and auto connection across the railroad. Additionally, there are no lighting fixtures, trees or sidewalks. However, the Team feels this street has the most potential for a pedestrian connection, as the traffic is not as heavy as on Washington and Fruitland. If extended to the levee, with a skywalk over Columbia Drive and a public plaza at the termination point, this street could provide pedestrians with easy access to the Columbia River and recreational amenities.

Benton Street in particular would serve as a key pedestrian byway, extending to Entiat Street with residential and commercial uses along the way. It would terminate in a public plaza just south of the levee. Here, members of the public could use a new aquatic center, stroll around shops, connect to the wetland trail, or go down some steps to the new beach.

Highlight Entry Gateways

The existing entry points (Highway 395 and Cable Bridge) to Columbia Drive are underwhelming. As the saying goes, “you never get a second chance to make a good first impression.” The Highway 395/Blue Bridge interchange in particular needs to be reconfigured for functionality as well as to minimize confusion. The current commercial construction project underway at the entry to Columbia Drive is a marked improvement, but more enhancement is needed.

For the Cable Bridge/Gum Street entry, much potential for improvement exists. By removing some of the clutter and using the open space to advantage, the entry could be transformed in relation to Duffy’s Pond. The Team recommends designing the Highway 397 interchange for a simpler, more attractive entry into the area.

Create a Regular Street Grid

The Team recommends providing a regular street grid with continuity to improve residential and commercial access and provide more revitalization opportunities.

Plant Streetscape Amenities

The streets in the B2/R2 area should be upgraded with a planned program of street trees, street lighting, curbs, gutters, pedestrian-oriented intersection crossings, lighting and other improvements that will enhance the look, function and safety of the area.

Parks and Open Space

Duffy’s Pond

To accommodate increased tourist activity projected for the area, the restored Duffy’s Pond natural area would be backed up by condominiums and possibly a hotel. The Team envisions four stories of residential use above one story of parking (to visually breach the levee). The townhouse design would undulate, creating a “hard” side for parking, and a “soft” side for open space enjoyment. Fairly high traffic volume along Washington St. will help new development in this location be successful.

Kennewick Beach

A new swimming beach on the river shore could be created relatively easily by placing it in on the upstream side of the Clover Island causeway. This appears to have some advantages because it would remove a below-water environment that is dangerous to salmon, and it would create a new, shallower angle on the upstream side of Clover Island, where a recreational beach could be developed. The UDAT Team believes that this feature would be cost-effective and relatively easy to develop. Parking for beach-goers could be created close to the beach.



Cable Bridge Gateway



Gateway Approach



Looking South at Washington St. from Clover Island



Kennewick Beach



Building in Railroad Corridor



Adaptive Re-use of Industrial Building

Land Uses

Railroad Corridor

In the corridor, the industrial buildings could remain if they were maintained, with many of the current uses continued through their economic life. However, the longer-term vision for this corridor is the renovation of these industrial buildings for other uses utilizing their large footprints and sculptural shapes to house uses that play to industrial tourism.

Industrial Tourism Potential

Lampson Crane, a world-wide crane company, is a very interesting business, partly because it involves big machines that most people don't get close to in their day-to-day lives. The area around the Lampson property is busy with industrial activity; its assets include sculptural large-scale grain elevators and shipping docks. With attention to the possibilities of tourism and providing a downtown feature for visitors, this area could be a featured stop on any Columbia River tour.

Enhanced Industrial District

Adjacent to this area, large acreages of vacant land at the eastern termination of Columbia Drive, and the existing large-scale industrial firms already in place there, point to a readily available area dedicated to industry. Industrial businesses currently located along the railroad corridor could be relocated here, shifting heavy truck traffic away from the Downtown Kennewick area.

Downtown

Recent revitalization efforts are already turning the Downtown Kennewick area into a more vibrant place to work and visit. Additional enhancements, such as the Façade Improvement Program (\$100K annually) are planned by the community. This area has great potential for the unique shops that attract business, and can serve as an anchor for the Columbia River connections from Washington, Benton and Fruitland Streets.

Residential

The UDAT Team felt that though the residential neighborhoods were in good shape for the most part, they could be revitalized and strengthened through enhancements and infill. This would apply to areas south and west of downtown, and south of Columbia Drive (north of the railroad). In addition, more residential neighborhoods could be added north of Columbia Drive, which would enhance and strengthen the existing residential neighborhoods. Among these areas are:

- Entiat Avenue west of Fruitland and surrounding streets consists of small, well-kept homes. A renovation and infill strategy here could preserve and enhance the neighborhood and provide a buffer to the commercial uses on Columbia Drive.
- North of Columbia Drive there is great opportunity for residential revitalization. Areas of substandard mobile homes and other substandard residential structures should be made into areas where standard, safe and attractive housing for a variety of residents can be created, and no one has to cope with housing conditions such as those existing today.
- Between Columbia Drive and the levee infill residential development alternatives are numerous. The City of Kennewick should create planning and design guidelines for rebuilding this area, so that the long-term objective of creating a new riverfront can be achieved as this area builds out.



Residential Site Plan



Residential Area Development

Implementation Strategies

Making the UDAT vision a reality starts right now with completion of actions that are already underway, complemented by longer term projects that will take a number of years to realize, but which can achieve the community's larger goals.

To implement the UDAT vision, forward momentum should be achieved through a series of projects in three distinct periods over the course of the next twenty years.

"Ignite the Spark" consists of critical activities that should be started or completed in the next three years and help achieve a sense of forward motion. They are easiest to attain and therefore should be addressed immediately to help generate community support and buy-in to the Plan.

"Build the Base" is a series of mid-term projects of a larger scope that need to begin now, because their completion will take considerable effort, horsepower, and community commitment. These projects will involve partnerships and networking with a variety of entities to put together a strong support group for addressing these difficult or complex projects.

"Complete the Vision" is the set of longer-term projects that can be phased in at a later date to achieve all the goals of the UDAT vision.

The study area also includes Clover Island, and its market demand is shown in Appendix A, Table 2, followed by forecast demand for the remainder of the study area shown in Appendix A, Table 3. The following are key phasing and priority considerations for development in this area.

Clover Island is viewed as the catalyst to stimulate additional development in the study area since this area has existing restaurant, lodging and marina development and is moving forward more quickly than the remainder of the area. The Port of Kennewick should continue with implementation of the Clover Island development.

The next critical step is to solve the issue of the levee along the Columbia River acting as a barrier. While this barrier cannot practically be lowered to the same level as the development, it is considered possible to lower it about six feet on average. Additionally, design features in conjunction with the open space, pedestrian and biking pathways will help to integrate the river frontage with the new development.

The third critical action is to provide for the redevelopment of the mobile housing and trailer park development directly across from Clover Island along either side of Washington Street as it enters the island. Higher density condominiums and/or apartments will provide additional market support and begin to move development through the study area and toward the existing Downtown Kennewick Central Business District (CBD) along Kennewick Avenue. Clearly, relocation of housing will be a very important component of this step.

As these actions are taking place, open space and pedestrian and biking pathways along the waterfront will need to be established to provide continuous movement and amenities in this corridor and to join this area with Columbia Park to the west. Additionally, recreational and cultural venues should be developed in this corridor to draw visitors and residents from outside the study area.

As these steps are under way, the north-south linkages with the Downtown Kennewick CBD will need to be established, particularly along Washington, Benton and Fruitland Streets. This is where the office component becomes important as a development theme, both near Downtown and as a possible redevelopment catalyst for the industrial area that extends up to Washington Street on the east side.

Additionally, retail may be established as a mixed use in this area along with live-work housing, where typically design professionals and artisans create innovative spaces that also help to energize an older area.

While the railroad tracks act as a barrier that will need attention, it is hoped that additional pedestrian walkways, lighting, signage and beautification enhancements will help to mitigate their impact on the study area and CBD. Some consideration should be given to either narrowing the corridor or developing uses in the existing space that generate minimal trips, such as mini-storage.

Finally, approval of the plan by the appropriate entities, including but not limited to the City of Kennewick, Port of Kennewick, Washington State Department of Ecology, and U.S. Army Corps of Engineers, will be important, as well as acceptance by the general public and the business community. This sets the stage for developing the financial implementation plan.

Bridge to

Implementation Strategy

Ignite the Spark		Complete the Vision
0-3 years	0-6 years	6-10 years
<p>Lower the Levee - U.S. Army Corps of Engineers lower top of levee by six feet</p> <p>Sacagawea Trail - Build Kennewick section of trail on newly widened top of levee</p> <p>Clover Island Redevelopment - Break ground</p> <p>Initial Riverfront Restoration - Duffy Pond Improvements</p> <p>Beach Access (north of Washington & Benton Streets) - Break ground</p>	<p>Gateways Development Coverleaf redesign 395 improvements at Cable Bridge Columbia Drive Improvements</p> <p>Railroad Tracks Consolidation Combining track corridors Evaluate spurs utilization Create a commuter / Amtrak station at the existing depot Connections to or relocation of transit hub</p> <p>Washington Street - Completed</p> <p>Benton Street Extension & Connection - Design & break ground</p> <p>Fruitland Street Connection Design & break ground</p>	<p>Gateways construction</p> <p>Clover Island Completion</p> <p>Benton Street Completed</p> <p>Fruitland Street Completed</p>
Build the Base		
<p>Continue Downtown Revitalization Rename Downtown 501(c)(3) as <i>Historic Downtown Kennewick Partnership</i> Continue work with the City of Kennewick's Housing Rehabilitation Program to secure block grants Define Infill Opportunities Develop tenant mix strategy / theme</p> <p>Develop Transportation / Infrastructure Project Applications for federal funds (e.g., TEA 21)</p> <p>Develop Detailed Riverfront Park Plan Habitat restoration Salmon protection Maintain flood protection</p> <p>Create a CDC - Community Development Corporation for Riverfront & Residential Revitalization Work with existing programs in the City's Neighborhood Revitalization Strategy Area on downtown neighborhoods: Redefine UDAT Plan in the <i>Neighborhood Revitalization Strategy Area</i> Zoning, Development Standards, Design Guidelines Housing Strategies* Inform Concept Plan Refine Transportation Concept</p>	<p>Expand the staff capacity of the City's Housing Rehabilitation Program and work in partnership with the Housing Authority on the goal of CHDO status for the Housing Authority with focus in this area</p> <p>Work with Ben Franklin Transit & Department of Transportation</p> <p>Riverfront Park implementation by stages</p> <p>*Housing Strategies Work with City of Kennewick on housing revitalization in the Riverfront Park & downtown area. Replace substandard housing with new opportunities for a range of income levels</p> <ol style="list-style-type: none"> loans & grants, relocation acquisition, home ownership opportunities, zoning enforcement inclusionary zoning - establish a 10-20% goal for affordability of all new & renovated units use federal HOME program as a financial incentive on a portion of projects <p>Encourage City Council & staff to meet with Housing Authority Board and bring in Regional HUD representative Explore a number of financial sources for housing redevelopment in focus</p>	

Ignite the Spark: 0-3 Years

Promote the completion of the Sacagawea Heritage Trail, especially through the Bridge to Bridge/River to Railroad area. Lower the levee between the Blue and Cable Bridges to create the trail through the area. With the 2005 bicentennial of the Lewis and Clark Expedition's stay in this region, the completion of the 26-mile bike trail/pathway that extends along the river through multiple jurisdictions in two counties can help bring focus to the levee lowering within Kennewick and promote the redevelopment of the riverfront.

Support present efforts of the Port of Kennewick in adoption and implementation of a plan for redevelopment of Clover Island. Clover Island is a critical element in the development of the north-south axis at Washington Street.

Begin planning and construction of new Riverfront Park. As the levee is lowered and the pathway built, soften the back or south side of the levee with gradual sloping and planted grass creating public access to the water. Design park for greater pedestrian access behind the levee as well as on the levee.

Complete first improvements to Duffy's Pond. Puncture the levee with culverts in order to introduce water behind the levee and into Duffy's Pond. Demonstrate the possibilities of creating more beautiful natural areas around wetland. Enable better environmental restoration, reduce stagnation, and increase the water flow in the ditch.

Create better habitat restoration by creating beach area or land shaping west of the causeway to Clover Island. Provide better public access to the Columbia River.

Begin designing the Washington Street connection between First Avenue and Clover Island with a unique streetscape treatment. Create a special corridor running north-south that will enhance the feel of connecting the Columbia River to Downtown Kennewick and will reduce the unwelcome impact of crossing the railroad tracks.

0-6 Years

Redesign Cloverleaf at Highway 395 to improve access to area.

Construct improvements to Columbia Drive including streetscape and road redesign, including unkinking at Fruitland Street and parking reconfiguration.

Combine railroad track corridors.

Evaluate utilization of railroad spurs with goal of eliminating unneeded ones.

Create a commuter rail/Amtrak station at the existing railroad depot.

Relocate existing transit hub within area.

Complete Washington Street improvements.

Design and break ground for Benton Street Extension and Connection.

Design and break ground for Fruitland Street Connection.

Build the Base: 0-3 Years

Support efforts to main a strong Downtown Historic District. Continue progress as a Main Street community. Support 501(c)(3) Downtown Association's continuance of projects on Kennewick Avenue, including façade improvement, retail recruitment and retention, and infill development. Endorse new name of Historic Downtown Kennewick Partnership and focus of Association on CBD. Develop the re-alignment plan for Columbia Drive for implementation as new development comes on line, as recommended in the UDAT plan.

Encourage the City of Kennewick to develop a Community Development Corporation (CDC) to implement the B2/R2 Plan. Ensure effective completion of the Plan through qualified and dedicated staff to focus on its delivery. Identify area as a Redevelopment Area with CDC established as a 501(c)(3) to coordinate the activity. Utilize the CDC to access a variety of funding and organizational opportunities that a city or port or other public agency may not be able to utilize.

Refine the UDAT B2/R2 Plan and develop strategies to implement the guts of the Plan. This is key. Work through the tough issues to establish proper and effective zoning, implement comprehensive design guidelines, create strong development standards, address critical housing needs and opportunities, explore solutions to infrastructure problems including redesign of Cloverleaf, develop improved transit connections, and promote sufficient flood protection.

Enable the City Council and the Housing Authority Board of Directors to meet with regional HUD representatives to discuss mutual housing issues and solutions.

Strongly encourage City of Kennewick and Kennewick Housing Authority to work together to address critical housing needs in the area. Develop a plan for relocation of displaced persons, support rehabilitation of housing in the area, especially in the area between the railroad tracks and Columbia Drive west of Fruitland Street.

Establish inclusionary zoning with the goal of 10-20% affordable housing in all new developments.

Explore a number of financial sources for housing redevelopment in the area.

Develop a Transportation/Infrastructure Project among the City of Kennewick, Ben Franklin Transit, Washington State Department of Transportation, and other agencies to develop transportation/transit plan and seek funding from a variety of transportation-oriented sources.

3-6 Years

Expand Housing Rehabilitation Plan to enable a strong, focused emphasis on rehabilitation of the residential housing within the area. Form partnerships between the City of Kennewick and the Kennewick Housing Authority to form a Community Housing Development Organization (CHDO) with the goal of creating a variety of housing opportunities within the area.

6-10 Years

Create a land bank to assemble properties to serve as relocation resources for future park development.

Complete the Vision: 6-10 Years

Construct new gateways to Columbia Drive off of both Cable and Blue Bridges.

Complete Clover Island redevelopment.

Finish construction of Benton Street improvements.

Finish development of Fruitland Street improvements.

Continue development of residential and mixed-use development between Columbia Drive and the Columbia River. This development will be designed to standards created in earlier phases so it forms a new levee barrier behind the existing levee.

Complete the naturalized riparian area south of the levee.

10-20 Years

Continue to develop residential, commercial and mixed use development between Downtown and the Columbia River. The existing levee may be removed when there has been a sufficient and complete barrier erected to protect against flooding. This protection will be built into each new development as it is designed, engineered and built. Work carefully with existing landowners to create a win-win condition for all parties, as value is increased in the new development area.



The marina at Clover Island

The Financial Implementation Plan

The financial implementation plan becomes the method by which the B2/R2 Plan can be realized. While public financial support is important in moving the plan forward, it is really an effective public-private partnership that will create the conditions that lead to a successful B2/R2 Plan. Some of the key financial considerations include:

The Port of Kennewick

The Port of Kennewick is already committed to implementing the Clover Island Master Plan as a first step. Since the Port of Kennewick controls the land resources on Clover Island, this removes a key hurdle that influences the remainder of the B2/R2 Plan in the study area – namely, the multiple private ownerships that must be reconfigured and redeveloped. Probably the greatest financial component is reconfiguration of the corridor along the riverfront that includes the levee and the related open space and recreational amenities.

The U.S. Army Corps of Engineers

While total public costs have not been estimated, it is expected that at least \$5 million will be needed from the U.S. Army Corps of Engineers (assuming the Corps' Section 1135 environmental restoration program is used as a vehicle to fund levee improvements). This will require local matching funds on a 75%/25% basis – or about \$1.7 million. The local match could be from the City, the Port, other non-federal sources, or some combination thereof.

Because the total cost is very likely to go beyond these funds, other sources will need to be explored, which could include state and federal grants or a direct Congressional authorization and appropriation.

Industrial Development District

Another potential funding source is the reestablishment of the Port of Kennewick's Industrial Development District (IDD). Through this mechanism, the Port would be able to levy and collect a special assessment of up to \$0.45 per \$1,000 of assessed property valuation within the Port District. The assessment could be used to acquire and improve lands within the IDD boundaries. The IDD boundaries created in 1996 extend from the Cable Bridge on the east to the mouth of the Yakima River on the west, and from the middle of the Columbia River on the north to Columbia Drive/SR240 on the south.

It has been estimated that roughly \$2 million annually, for up to 10 years, could be raised through the IDD levy. However, not all of the revenues would necessarily be allocated to the Kennewick riverfront restoration project; some of the levy could be allocated to other projects within the IDD boundaries but outside of Kennewick, such as the Port's Spaulding Business Park in Richland. One potential obstacle to this approach is that a popular vote may be required to reestablish the assessment.

Impact Fees

Additionally, impact fees on private development should be considered. This could be used for funding public costs that cannot be funded through local (city or port), state or federal government resources. At Columbia Point in Richland, for example, developers of riverfront sites are required to invest \$410 per lineal foot along the river's edge for public amenities to an existing 12' asphalt trail—lighting, benches, trash receptacles, etc.

Community Development Block Grants and U.S. EDA

Other resources include Community Development Block Grants, which are federal funds administered through the City of Kennewick; and the U.S. Economic Development Administration, which provides grants and loans for worthwhile economic revitalization programs.

TEA-21 and Salmon Recovery

Also, there are a number of other public funding sources that may be considered, such as the Federal Transportation Efficiency Act (TEA 21) that can be used for enhancing downtown areas, particularly when they establish linkages between multiple transportation modes. Another possibility is Washington State's Salmon Recovery Funding Board that provides grants for shoreline habitat restoration projects.

Local Sources

And finally, there may be local fundraising efforts to establish financial resources to create entertainment, cultural and recreational venues, including museums, performing arts, historical and civic facilities.



Kennewick Band, 1905

Appendices



Appendix A: Market Overview

1.0 Market Phasing and Priorities

Three market scenarios, “Low, Medium and High,” were prepared to assist the UDAT team in developing a land use plan for the Bridge to Bridge/River to Railroad study area. As shown in Table 1, the various components of total net new demand identified were: Boat Slips, Retail, Lodging, Office and Residential development. As shown in Table 1, the total residential units range from 580 to 650 over a 20-year period. Total retail demand ranges from 56,700 sq. ft. to 86,000 sq. ft. A major source of information was the recently prepared, *Clover Island Highest & Best Use Study*, BST Associates, Bothell, Washington, March 2003.

1.0 Market Demand Scenarios

1. Total Study Area Demand – The total study area demand forecasts are presented in Table 1 for Low, Medium and High scenarios and include both Clover Island and the remainder of the downtown study area. The major non-residential land use components include: retail development ranging from 56,700 to 86,000 sq. ft., and office development ranging from 215,000 to 340,000 sq. ft. The long-range forecast is until 2020; and the office development in particular may take some time to fully occur. The residential development, including condominiums and apartments, ranges from 580 to 650 units. A key consideration will be creating new development that complements the downtown commercial core with the new residential, office and retail land uses.

	Low	Medium	High
1. Net Additional Boat Slips (#)	-12	82	208
2. Retail (sq. ft.)			
a. Convenience/Food Store	3,000	3,500	4,000
b. Restaurant	14,000	19,500	25,000
c. Café/Deli	5,500	5,500	5,500
d. Specialty Retail	13,000	16,250	19,500
e. Marine Retail	1,200	1,600	1,200
f. Health Club	20,000	25,000	30,000
Total Retail sq. ft.	56,700	71,350	86,000
3. Lodging (rooms)	100	125	150
4. Office			
a. Commercial Office (sq. ft.)	135,000	157,500	180,000
b. Medical Office (sq. ft.)	40,000	60,000	80,000
c. R&D/Live-Work (sq. ft.)	40,000	60,000	80,000
Total Office	215,000	277,500	340,000
5. Residential			
a. Condominiums ^{1,2}	500	530	560
b. Apartments ³	80	85	90
Total Residential	580	615	650
6. RV Park (spaces)	80	100	120

1. Condos would range in size from 850 to 2,300 sq. ft.
2. Average prices ranging from \$164,000 to \$329,000.
Average price \$243,000
3. Rents Ranging from:
 - a. Studios - \$335 to \$465 per month
 - b. 1-Bedroom - \$400 to \$485 per month
 - c. 2-Bedroom - \$500 to \$600 per month

Source: Stanley R. Hoffman Associates, Inc.

2. Clover Island - The Clover Island forecasts are presented in Table 2 and are based on the *Clover Island Highest and Best Use Study*. This study forecasts a modest increase in retail activity ranging from 12,200 to 16,000 sq. ft. and serving tourists, local residents and new residential and office development on the island. A range of 100 to 130 condominium units are forecasted along with 75,000 to 90,000 sq. ft. of office development that would like a “signature” location with high amenities and visibility. Additional lodging on the island is not envisioned. However, the marina could be reconfigured and could include 82 to 208 additional boat slips.

Table 2 Clover Island Market Summary: Forecast to 2020			
	Low	Medium	High
1. Net Additional Boat Slips (#)	-12	82	208
2. Retail (sq. ft.)			
a. Convenience/Food Store	1,500	1,750	2,000
b. Restaurant	4,000	4,500	5,000
c. Café/Deli	2,500	2,500	2,500
d. Specialty Retail	3,000	3,750	4,500
e. Marine Retail	1,200	1,600	2,000
f. Health Club	0	0	0
Total Retail sq. ft.	12,200	14,100	16,000
3. Lodging (rooms)	0	0	0
4. Office			
a. Commercial Office (sq. ft.)	75,000	82,500	90,000
b. Medical Office (sq. ft.)	0	0	0
c. R&D/Live-Work (sq. ft.)	0	0	0
Total Office	75,000	82,500	90,000
5. Residential			
a. Condominiums ^{1,2}	100	115	130
b. Apartments ³	0	0	0
Total Residential	100	115	130
6. RV Park (spaces)	0	0	0

1. Condos would range in size from 850 to 1,500 sq. ft.
2. Average prices ranging from \$164,000 to \$329,000.
Average price \$243,000.
3. Rents ranging from:
 - a. Studios - \$335 to \$465 per month
 - b. 1-Bedroom - \$400 to \$485 per month
 - c. 2-Bedroom - \$500 to \$600 per month

Source: Stanley R. Hoffman Associates, Inc.

3. Remainder of Study Area – The forecasts for the remainder of the study area are shown in Table 3. This forecast shows the greatest development of residential units, ranging from 580 to 650, and including a mix of condominiums and apartments. The key issue is creating a residential environment that links with the waterfront and the downtown and providing local services and amenities. Also, an important long range objective is to bring more office development into the area, with demand estimates ranging from 215,000 to 340,000 sq. ft. This is seen as both serving the local population, such as medical offices, and in making a transition between the existing industrial area and the downtown. Also, retail development, ranging from 56,700 to 86,000 sq. ft., is seen as an important linkage between the Clover Island development and the downtown core.

	Low	Medium	High
1. Net Additional Boat Slips (#)	0	0	0
2. Retail (sq. ft.)			
a. Convenience/Food Store	1,500	1,750	2,000
b. Restaurant	10,000	15,000	20,000
c. Café/Deli	3,000	3,000	3,000
d. Specialty Retail	10,000	12,500	15,000
e. Marine Retail	0	0	0
f. Health Club	20,000	25,000	30,000
Total Retail sq. ft.	44,500	57,250	70,000
3. Lodging (rooms)	100	125	150
4. Office			
a. Commercial Office (sq. ft.)	60,000	75,000	90,000
b. Medical Office (sq. ft.)	40,000	60,000	80,000
c. R&D/Live-Work (sq. ft.)	40,000	60,000	80,000
Total Office	140,000	195,000	250,000
5. Residential			
a. Condominiums ^{1,2}	400	415	430
b. Apartments ³	80	85	90
Total Residential	480	500	520
6. RV Park (spaces)	80	100	120

1. Condos would range in size from 850 to 2,300 sq. ft.
2. Average prices ranging from \$164,000 to \$329,000. Average price \$243,000.
3. Rents ranging from:
 - a. Studios - \$335 to \$465 per month
 - b. 1-Bedroom - \$400 to \$485 per month
 - c. 2-Bedroom - \$500 to \$600 per month

Source: Stanley R. Hoffman

4. Estimated Retail Sales Capture - The estimated capture by the new residential development in the study area is estimated at about 22 percent of total retail sales potential. This is based on retail sales data from the Washington State Department of Revenue and estimated capture assumptions made by Stanley R. Hoffman Associates, Inc. as shown in Table 4.

Table 4 Estimated Downtown Retail Sales Capture			
Retail Category	Retail Sales	% Cap.	Amt. Cap.
Building Materials	\$112.9	10.0%	\$11.3
General Merchandise	\$343.5	10.0%	\$34.4
Food	\$361.9	25.0%	\$90.5
Apparel	\$75.2	25.0%	\$18.8
Furniture/Fixtures	\$84.6	10.0%	\$8.5
Eating/Drinking	\$173.7	50.0%	\$86.9
Specialty Retail	\$135.0	25.0%	\$33.8
Total	\$1,286.8		\$284.0
% Captured in Downtown			22.1%

I. This is based on 2001 retail sales data from BST Associates and Washington State Department of Revenue.

Source: Stanley R. Hoffman Associates, Inc.

5. Estimated Retail Sq. Ft. from New Residential Development - Based on the capture assumption derived in Table 4, an increase in retail demand of about 10,330 sq. ft. is shown in Table 5. This is based on about 500 new households in the study area, not including Clover Island, and an estimated average household income of \$58,500.

Table 5 Estimated Retail Sq. Ft. - New Downtown Households	
Factor	Category
500	Households
\$234,000	Average Housing Value
25.0%	Income as % of Housing Value
\$58,500	Estimated Average Income
32.0%	Retail Expenditure as % of Income
\$18,720	Est. Retail Expenditures/Household
\$9,360,000	Total Household Retail Expenditures
22.1%	% Captured in Downtown
\$2,065,594	Amount Captured
\$200	Annual Sales per sq. ft.
10,328	Estimated Retail sq. ft.

Source: Stanley R. Hoffman Associates, Inc.

6. Estimated Retail Sq. Ft. from New Employment Development – Similarly, new retail demand is projected based on office development of about 195,000 sq. ft. Using an assumption of 330 sq. ft. per employee results in an increase of about 590 employees in the study area, not including Clover Island. Using an estimate of \$1,200 in annual retail sales per employee yields an additional increase in retail demand of about 3,550 sq. ft. particularly from eating and drinking activities and specialty retail as shown in Table 6.

Table 6 Estimated Retail Sq. Ft. - New Employees	
Factor	Category
195,000	Commercial sq. ft.
330	Sq. Ft./Employee
591	Estimated Employees
240	Annual Work Days
\$5	Avg./Day/Employee
\$1,200	Annual Expenditures
\$709,091	Total Expenditures
\$200	Annual Sales per sq. ft.
3,545	Estimated Retail sq. ft.

Source: Stanley R. Hoffman Associates, Inc.

7. Estimated Regional Household Retail Sq. Ft. Demand – As shown in Table 7, an increase in retail demand of about 57,000 sq. ft. is forecast based on a projected increase in households regionally of about 24,340 for the Tri-Cities region, consisting of Benton and Franklin Counties. This assumes of capture of about 2.5 percent of their retail purchases within the downtown area.

Table 7 Estimated Retail Sq. Ft. - Retail Household Demand	
Factor	Category
24,339	Growth in Households: 2000-2020
\$234,000	Average Housing Value
25.0%	Income as % of Housing Value
\$58,500	Estimated Average Income
32.0%	Retail Expenditures as % of Income
\$18,720	Est. Retail Expenditures/Household
\$455,626	Total HH Retail Expenditures (in 000s)
2.5%	% Captured in Downtown
\$11,390,652	Retail Sales Captured
\$200	Annual Sales per sq. ft.
56,953	Estimated Retail sq. ft.

Source: Stanley R. Hoffman Associates, Inc.

8. Total New Demand: 2000 – 2020 – The total new demand from 2000 to 2020 from new households and employment in the study area, and growth of new households regionally, is shown in Table 8 at 70,826. This demand increase will take place over time and is dependent on the pace at which the region grows and the ability to create new residential and office development within the study area.

Table 8 Estimated Retail Sq. Ft. - Total New Demand: 2000-2020	
Factor	Category
10,328	New Downtown Households
59,953	New Regional Households
3,545	New Downtown Employment
70,826	Total Retail Demand (sq. ft.)

Source: Stanley R. Hoffman Associates, Inc.

Appendix B: Keys to Kennewick's Evolution



In 1954, after the completion of McNary Dam, Kennewick's landscape was changed with the creation of Lake Wallula, the addition of Kennewick's levees, the build-up of Clover Island, and the completion of the Blue Bridge.

Throughout the history of this region, the Columbia River and its confluence with the Snake, bringing together two mighty North American rivers, has been the key factor in human settlement and sustenance of life here. To envision a future for Kennewick, the UDAT considered how key events in the history of the region, nation, and world changed the role of the Columbia River, in turn leading Kennewick through an historic evolution. Now, planning for the future, Kennewick has the opportunity to utilize this history to be pro-active in its future relationship with the Columbia River.

The Columbia River

As the fourth largest river in North America, the Columbia River is nothing if not powerful. It flows for more than 1,200 miles, from the base of the Canadian Rockies to the Pacific Ocean. Within the United States, the Columbia River courses southwest and skirts a massive Columbia Plateau lava flow, then it turns to the southeast, cutting a gorge in the volcanic shield when it joins the westward flowing Snake River at Kennewick, then runs west to the Pacific Ocean.

The Columbia has nine tributaries, the largest being the 1100-mile long Snake River. The Columbia River Basin includes a diverse ecology that ranges from temperate rain forests to semi-arid plateaus. A scenic portion of the Columbia River cuts through the Cascade Mountain Range, creating the 100-mile long 3,000-foot deep Columbia River Gorge between Washington's southern border and Oregon's northern border. Before massive dam building in the 20th century, the Columbia River plunged over basalt cliffs and rapids in the Gorge. The Columbia River has historically influenced the lives of those who live and play along its banks, from indigenous residents to the community today. For thousands of years

Indians found winter refuge along the banks and summer recreation on islands near the confluence of the Umatilla and Columbia Rivers. Changes in the lands along the Columbia River occurred as non-native peoples – first explorers, then missionaries, Chinese and American gold miners, farmers, ranchers, and the diverse emigrants of the twentieth century – entered the region.

The Center of Nowhere

Called by various names like the Great Forks, Three Rivers, Columbia Valley, or the Great Columbia Desert, the region surrounding the Tri-Cities is a notably arid landscape split by dazzling waterways. Though beautiful, the dry, virtually treeless land has always been difficult to live on. However, from the end of the last Ice Age to the mid-19th century, the Columbia Basin was home to many cultures. The earliest archaeological evidence of human habitation in the Columbia River Basin dates to 10,000 B.C. The earliest groups lived by fishing, hunting large mammals, and gathering plant foods. Around 1800 A.D., more than 3,000 Indians lived between the present town of Vantage and the mouth of the Snake River near Kennewick. The 1996 discovery of bones thought to be around 9,000 years old and of Eurasian descent along Kennewick's river shore was a major find. The implications of Kennewick Man are still being debated in scientific and cultural circles, as well as in the courts.

In an effort to attract settlers to eastern Washington, the territorial governor held a council in 1855 with area tribes to devise a reservation system. Today, many of the descendants of the Columbia Basin's early Native American population live on four nearby reservations. They continue to play active roles in regional cultural and political activities.

A gold rush took place between 1858 and 1860 north and east of the Columbia Basin. Prospectors passing through here explored the entire length of the mid-Columbia River but found little in the way of gold. The traffic of the gold rush, however, resulted in the growth of White Bluffs landing, long a central crossing and debarkation point for local Indians. It became a favorite place to ford cattle and supplies and to trade and purchase supplies. Thus, ranching became the chief way of making a living in the Columbia Basin in the mid-1800s.

Ranching dominated the Columbia Basin until the Northern Pacific Railroad started building south from Spokane. In 1882, railway engineers platted and founded the towns of Pasco and Kennewick, as this was flat land they needed to bridge the junction of the Snake and Columbia Rivers.



With the arrival of so many settlers into the region, the need for crop water quickly became apparent. Small irrigation
Early view from Kennewick looking north at the Columbia River before the dams.

companies and farmers' cooperatives started up in 1888, but were not capitalized, going bankrupt in the national financial panic of 1893. After a dormant period of two years, the Newlands Reclamation Act of 1902 provided long-term Federal financing for irrigation projects. The subsequent boom resulted in the founding of White Bluffs, Hanford and Richland, and the region stabilized into a network of farms and small supply and grain shipment towns.

The Great Depression of the 1930s hit the area very hard, driving agricultural prices so low that half of the farms in Franklin County were either foreclosed or abandoned. During this bust period, it took federal projects like the construction of Grand Coulee Dam upstream on the Columbia River to keep the economies of the small towns from completely stopping.

Thus, when the U.S. Army Corps of Engineers scouted the area in 1942 to evaluate its potential to support the war effort, the region was neither highly developed nor populated. In 1942, 4,000 people lived in the railroad town of Pasco, Kennewick held 1,800 people, and White Bluffs, Hanford and Richland combined for 1,500 people. Another 10,000 people were scattered throughout regional farms in Benton and Franklin counties. This demographic would change drastically following the bombing of Pearl Harbor in 1941 and America's immediate declaration of war.

Lewis and Clark

The Lewis and Clark expedition may be the most singular and important event in the exploration of North America. The expedition made significant additions to the zoological and botanical knowledge of North America, and its cooperation with the various Indian tribes enabled greater understanding of the native peoples. The expedition strengthened the United States government's hold on North America and it developed an overland route to the Pacific Ocean.

The Corps of Volunteers for Northwest Discovery traveled west from St. Charles, Missouri in 1804 following the Missouri River. Canoeing down the Snake River to its confluence with the Columbia, they stayed and traded with the Indians who lived there, now the site of Sacajawea State Park in Pasco. Clark and a small party explored upstream a few miles on the Columbia River, noting the good water and numerous salmon, passing by Clover Island and further upriver on the north shore of the Columbia stopping at one of the camps near present-day Richland. From the mouth of the Snake, the expedition set off down the Columbia and in less than three weeks reached the Pacific Ocean.

River Transportation

Beginning with the Indians who traveled by canoe up and down the Columbia River, and continuing with Lewis and Clark and other explorers, miners, trappers, and traders, river transportation was the principal means of getting goods and people through and to Kennewick. Kennewick's direct connection to the river bank, at the confluence of the Snake and Columbia Rivers, was a great advantage to easy river trade. The open flat land along the river between the docks and the railroad bridge were also important gathering places for the community. Celebrations like the Grape Festival took place there as people could meet at the water's edge.

Steamboats traveled the Columbia River beginning in the 1850s. During the 1880s, as the Northern Pacific rail line was being constructed across the Columbia River, it was the *Frederick Billings* that ferried rail cars, either two passenger cars or four freight cars at a time, across the Columbia from Pasco to Kennewick until the railroad bridge was constructed.



Steamboats made deliveries to Kennewick from the Columbia River

Once Kennewick began developing in the early 20th century, the town became a transfer point for a boat line on the Columbia between The Dalles in Oregon and White Bluffs in Washington. Wharves and warehouses were built.

Boats of all types could be found at the Kennewick docks. Steamships headquartered in Kennewick—some boosters wanted Kennewick to become the main river shipping center. Mail boats operated between Kennewick and upriver communities. Ferries between Pasco and Kennewick moved people and goods. Kennewick people enjoyed excursions to the neighboring communities of Hanford and White Bluffs up the Columbia near present-day Hanford.

The opening of the Celilo Canal at The Dalles in 1915 was a major milestone because until then, steamboats could go only as far as The Dalles. The completion of this canal was the culmination of years of dreams of opening up the Inland Empire with cheap, reliable river transportation, making it possible to travel from Portland to the upper Columbia and Snake Rivers. But the canal never lived up to its billing as not enough use was made of it due to seasonal low water.

The Kennewick Commercial Club created a five square mile port district to take advantage of the new Celilo Canal. During the early years, the port concentrated its efforts on building port facilities to accommodate the anticipated river-based trade. The importance of river transportation as a major force in the community diminished substantially with the building of the Pasco-Kennewick automobile toll bridge in 1922. Ferry service to Pasco ended as autos and trucks could travel the bridge over what became the Yellowstone Trail.

A major flood in 1926 devastated the Port of Kennewick, wiping out all its docks and transfer facilities. It was not until the 1940s that the Port reactivated, began purchasing real estate for industrial development, and signed its first lease with Columbia Marine Shipyards for construction of river vessels.



Railroad tracks through Kennewick.

Railroads

Kennewick began as a railroad construction camp for Northern Pacific Railroad as it was building its rail line to eventually reach a terminus on the west coast in the 1880's. At Pasco, the Northern Pacific found the best location to construct a bridge to cross the Columbia River.

As a railroad construction town, Kennewick grew to a camp of a few hundred people. But after the railroad bridge was finally completed in 1888, the population of Kennewick decreased dramatically, to fewer than a dozen people. Following the Flood of 1894, the tracks were moved south to their present location away from the river.

Following the incorporation of Kennewick, other rail lines built through Kennewick and constructed rail depots in the community. An at-grade rail line was built on the north bank of the Columbia to link Kennewick to the Pacific Ocean in 1908. In 1910, the United Pacific Railroad laid down tracks through Kennewick just south of the Northern Pacific tracks.

Passengers and freight were handled in Kennewick. Many newcomers arrived in Kennewick by train, greeted by the various dray companies. Transient hotels and restaurants developed along the railroad tracks for the passengers and packing and storage sheds for the freight.

A small brick Northern Pacific depot of the 1950s is all that remains of Kennewick's former depots. The Northern Pacific and the SP&S were two of the lines that merged to become Burlington Northern in 1970 and Amtrak assumed passenger service. Kennewick continues to have active tracks, but most rail activity has moved out of town.

Agriculture

In the parched desert, water was needed to grow crops. Beginning in 1892, starting with an 8-horse plow team, the first ground was broken for an irrigation canal to Kennewick, and by 1893 several settlers began the planting of the first commercial orchards under the Kennewick canal system.

However, the ditch was unreliable and failed frequently. Following the Panic of 1893 when outside investment ceased and many settlers left, construction stopped on the canal. In 1902 these properties passed to an arm of the Northern Pacific Railroad, the canal was reconstructed, and in 1903 water was finally delivered to the lands in Kennewick.

In 1903, just a hundred years ago, orchards of apples, peaches, apricots, pears, plums, and cherries began to be planted. Fruits such as strawberries and other smaller fruits and melons were planted, as well as asparagus, alfalfa and corn. Kennewick strawberries were known region-wide as being the earliest strawberries on the market. A small Strawberry Festival was organized.

By 1908 the Kennewick Highlands project was constructed and began watering the land in 1909. The Northern Pacific Railroad promoted these Kennewick projects, boasting of the agricultural potential of the Kennewick region. Small farms developed around the region, including the Garden Tracts along the river. Agriculture brought the need for packing sheds and warehouses which were built along the railroad tracks near the downtown, allowing for Kennewick's goods to get to market.

One who prospered and whose crop put Kennewick on the national map was Merlyn Church, who founded the Church Grape Juice Company in 1913. As early as 1911, Kennewick was celebrating its first Grape Carnival and Queen Tokay I. Agricultural exhibits, lectures, dances, and a carnival helped create a festival of the grape that repeated every year for five years.

Grapes continued to be Kennewick's principal agricultural crop. Church's Grape Juice was advertised and promoted around the world. The plant along the Northern Pacific tracks in Kennewick expanded as business grew. It was said that Church's had the largest Concord grape vineyard in the country, including an orchard just west of Downtown.

By the time of the Kennewick Grape Festivals of 1946 and 1947, Kennewick had grown, the War was over, and it was time to celebrate. The Grape Festivals created memorable experiences as a promotion of the agricultural bounties of the region and a chance to have fun. Spike Jones and his City Slickers performed on stage in 1946. The following year it was Ralph Edwards who brought his *Truth or Consequences* radio show to the Grape Festival while Buddy Rich and his orchestra entertained on stage.



Columbia River Valley Grape Carnival, early 1900's

Church's sold out to Welch's in 1953, becoming part of the National Grape Cooperative. Welch's tore out the grape vineyards, and housing for a growing community replaced them. With the building of the levee following the construction of McNary Dam, the River Road farms were eliminated, the houses moved, and Columbia Park was created. Highlands orchards were no longer productive and slowly orchards were replaced by residential and commercial development such that there is little remaining of Kennewick's agricultural bounty outside of a few scattered farmhouses and barns.

WWII and Hanford

The 20th century tie that has done the most to bind the Tri-Cities is the Hanford Site. Soon after the Japanese attack on Pearl Harbor, the U.S. Office of Scientific Research and Development recommended to President Roosevelt that the U.S. Army Corps of Engineers be brought into the secret atomic project to blend practical application with laboratory research. The President agreed, and charged the Corps with constructing industrial plants that could produce the highly-fissionable uranium-235 and plutonium-239 isotopes needed for the world's first atomic bomb.

Because of the isotopes' intense radioactivity, the search for a location to build the production facilities moved from the East and Midwest to the less-populated western United States. In December 1942, the area around White Bluffs, Hanford and Richland was explored and found to meet the project's site-selection criteria: isolation from populated areas and a vast fresh water supply. Representatives from the Manhattan Engineer District declared the Hanford area "ideal in virtually all respects."

Land acquisition proceedings began in January 1943, and in just over a year, the population of Benton and Franklin counties boomed to nearly 70,000. Richland was turned into a "government city" of 17,500 people, while town folk in Hanford and White Bluffs were paid to relocate. By the end

of the war, the MED had built 554 industrial buildings and the Hanford Project had constructed 386 miles of roadway, 158 miles of railroad, 50 miles of electrical transmission lines and hundreds of miles of fencing.

At the end of World War II, many of the Hanford Site facilities went to lower power and operating levels, reducing the work force by half. In 1947, the Atomic Energy Commission announced an expansion at Hanford, the largest peacetime construction project in America up to that time. During the next decade, additional expansions at the site helped to foster regional prosperity well into the 1960s. By 1962, the population of Benton and Franklin Counties stood at approximately 100,000 people, 54,000 of whom lived in the Tri-Cities.

Thus began the "boom and bust" cycle of the next several decades. In the mid-1960s, reactor and facility closures at the Hanford Site initiated a bust period, eventually resulting in a 1971 Hanford workforce of 6,900 – the lowest since 1947. During this bleak period, local business owners formed the Tri-Cities Nuclear Industrial Council, in an effort to find ways to diversify the regional economy. Their efforts were largely successful, and with the slightly reduced dependence on Hanford jobs, the two-county population remained stable at around 100,000.

Another boom occurred in the early 1970s, with construction of three commercial nuclear power reactors and other projects at the Hanford Site. Retail sales in the two counties rose 35 percent in 1974 alone, before a severe economic downturn began in 1982. Work stopped on two of the commercial reactors, a large Hanford Site facility construction project was completed, and one of Hanford's nuclear reactors was closed. During this time, Hanford Site employment immediately fell, housing starts and housing sales prices declined, while housing and retail vacancies, along with bankruptcies, rose. In the early 1990s, as the Hanford Site mission turned from



Government housing for Hanford constructed in the 1940's

production to cleanup, a slow trend of economic stabilization began to occur. Continuing efforts by local groups, combined with the outreach and diversification programs sponsored by the Department of Energy and their Hanford Site contractors, had taken hold.

Floods

Seasonal flooding is a natural disaster that has affected Kennewick's development as a riverfront community. The greatest flood ever to occur in this region was a 92 year event in 1894. A major flood in 1926 was devastating to the Port of Kennewick, wiping out all its docks and transfer facilities and causing the Port to cease operation. The flood of 1948, the one local residents remember most vividly, was a 30-year flood that caused widespread damage. At that time, the Bonneville, Rock Island and Grand Coulee dams were the only three dams on the Columbia, none having flood control capabilities. The U.S. Army Corps of Engineers had been working on creating additional dams for flood control, irrigation, and power generation. They built the Tri-Cities levees as a part of the McNary Dam project authorized in March 1945, with construction completed in 1953, too late to avert the 1948 flood. In the fifty years since the levees were built, no flooding has caused the river to breach them.



In the fifty years since the levees and dams were built on the Columbia River there have been no major floods in Kennewick



McNary Dam crosses the Columbia River between the southern border of Washington and the northern border of Oregon, approximately 25 miles south of Kennewick

Controlling and Using the River

The series of dams that reshaped the landscape and communities along the Columbia during and after WWII caused dramatic changes. The great river's flows provided the immense amounts of cooling water needed for the nuclear reactors at Hanford, and hydroelectric power from the dams fed aluminum plants and shipyards. By 1975, eleven dams stood on the main stem of the river, with many additional dams on major tributaries.

The Columbia River Basin is now the most hydroelectrically developed river system in the world. Currently, more than 400 dams and hundreds of major and modest structures on tributaries block river flows and tap a large portion of the Columbia's generating capacity: more than 21 million kilowatts. The dams create large reservoirs that provide flood control and water for vast irrigation systems on the Columbia Plateau. Today the engineered Columbia provides slack water navigation to the eastern regions of Oregon and Washington, including the Tri-Cities.

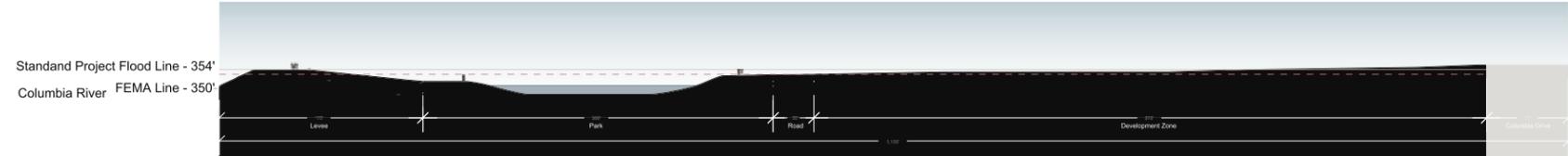


Appendix C Levee Sections

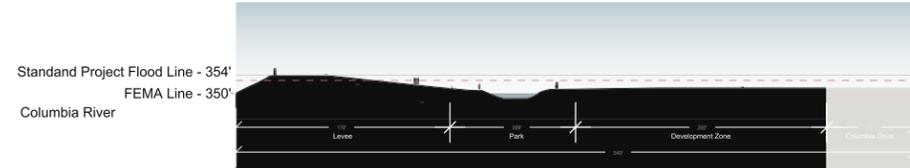
This series of studies of the levee were done during the UDAT team's workshop as a way to understand the magnitude of the proposals for modifying the levee's profile. These sections (like slices through the levee) are all done to the same scale. The key map illustrates the location of each section.



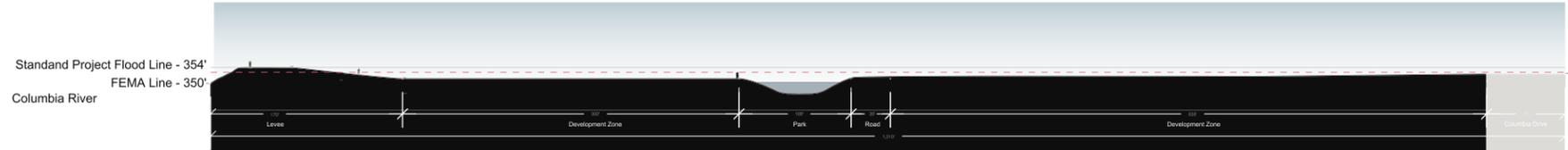
Section A Proposed



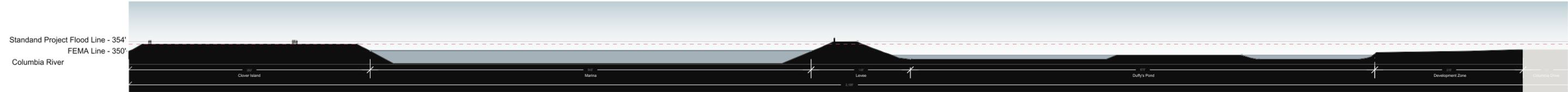
Section B Proposed



Section C Proposed



Section D Proposed



Section E Proposed

Acknowledgements





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City of Kennewick

Acknowledgements

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*Hanging kids' drawings in UDAT
workroom at the First United
Methodist Church in Kennewick*

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 Marge Price, Kennewick City Council
 Rick Peenstra, Community First Bank
 Donna Raines, Safe Harbor Crisis Nursery
 Joyce Robinson
 Lynne Roeder, Battelle Northwest
 Robert Sandoval, Washington Community Trade & Economic Development
 Paul Scharold, CE Williams Building
 Mark Showalter, Clover Island Yacht Club
 Ken Silliman, Farmers Exchange
 Penny Smith
 Bob Spaulding, Kennewick Planning Commission
 Gail Stack, Realtor
 Ann Steiger, Old Roxy Theatre Antiques
 Carl Van Hoff, Energy Northwest
 Douglas Wadley, Photographix Digital Imaging
 Gene Wagner, Port of Kennewick Commission
 Kris Watkins, Tri-Cities Visitor and Convention Bureau
 Christy Welch
 Rick White, City of Kennewick
 Karla Whiteside, Key Bank
 Ken Williamson, John's Auto Mart
 Bob Woehler, Kennewick Parks and Recreation Commission
 Kenny Wright
 Vel Wright



Kathy Kersey



Ted Luwaas

Contributors

American West Bank
Art students from Kamiakin, Kennewick, and Southridge High Schools
Art students from Horse Heaven Hills and Park Middle Schools
Banner Bank
Kristi Barclay
Ben Franklin Transit
Joce Berriochoa and the Kennewick School District Art Committee
Brutzman's Office Solutions
Don Carter, C2 Resources
Carl Christianson, U.S. Army Corps of Engineers
City of Kennewick
Clover Island Inn
Cindy Cole, City of Kennewick
Columbia Basin College
Cool Breeze Photography
D. Hittle & Associates
D. S. Watkins Gallery
Matt Daigle, KNDU TV
Jim Dillman, AIA
Dillman-Luvaas Architects, P.S.
Esprit Graphic Communications, Inc.
First United Methodist Church
Fluor Hanford
Pat Foley, Kennewick School District Facilities Planning
Chris Folta, Benton Public Utility District
Tim Fredrickson, Ben Franklin Transit
Sam Good, Port of Pasco
Ericca Goodnight
Gary Hansen
Harry Hoeckelbury
Corene Hulse, EastBenton County Historical Society
Ikon Office Solutions
Mike Johnson
Kennewick FOCUS Tailgate Barbecue Committee, including Marlis Lindbloom,
Marc Harden, Jan Fraley, Sam Shick, and Denise Christensen
Kennewick General Hospital
Kennewick Irrigation District
Kennewick School District Student Volunteers:
Josh Short, Gwen Hoy, Ivan Cuevas, Chad Peterson, Briana Brimley,
Stephanie Landry, Brooke Henderson and Jessica Miller
Michael Kersey
Rick Kersey
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Christie McAloon, Benton Public Utility District
Meier Associates
Mid-Columbia Library
Moon Security
Jennifer Mueller
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Port of Kennewick
Scott Revell, City of Kennewick
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Hank Sauer, Benton County Parks Commission
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Dennis Shannon, KONA Radio
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Tami Tremblay, KVEW TV
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Tri-Cities Enterprise Center
Tri-City Herald
John Trumbo, Tri-City Herald
Jennifer Vogel, KEPR TV
Washington Hardware and Furniture
Twila Wood, Kennewick School District International Baccalaureate



Big Brothers/Big Sisters

Tim Doyle–Daniel Ford
Gretchen Gwaltney–Jessica Hindman
Kathye Kilgore–Jane Willeboordse
Alan Kowalski–Soren Simonsen
Ted Luvaas–Ray Spano
Susan Mikels–Julie Roberts
Skip Novakovich–Patric Dawe
John Olson–Stanley Hoffman
Rick Peenstra–Larry Morrison
Marge Price–Laura Burnett

*Skip Novakovich, Chair,
B2/R2 Committee Community
Coordinator, Kennewick UDAT Visit*



UDAT Team

***Patric Dawe, AIA AICP, Chair;
Director of Urban Design, RNL, Denver, CO***

Pat is an architect/urban designer with 36 years of experience in leadership of urban planning and design projects for public and private sector clients. He has led numerous projects across the country including transportation, redevelopment, streetscape and revitalization plans, comprehensive regional plans, specific project plans and architectural design. He is a veteran of two previous Urban Design Assistance teams in North Carolina and Dundalk, Maryland.



***Laura Burnett, ASLA;
Senior Associate, WRT, San Diego, CA***

Laura is a registered landscape architect in California with over 18 years of experience in a broad range of projects for public agencies, universities and multi-agency organizations, urban design, habitat restoration, transit-oriented facilities, park and open space resource projects. Laura has led numerous project teams including architects, engineers, public artists and citizens advisory committees.



***Daniel Ford, ASLA;
Urban Designer, Design Workshop, Denver, CO***

Dan is an urban designer and landscape architect has been working on historic redevelopment, urban renewal and Transit-Oriented Development projects in all sizes of communities in Colorado and nationally. He has extensive experience in community planning processes. He is currently an urban designer on a 60-acre downtown mixed use Las Vegas project.

***Jessica Hindman,
Graduate Student in Urban Design, North Carolina State University***

Her undergraduate experience was in civil engineering at Duke University. At NC State, she has been a teaching assistant in engineering. In her professional life, she has been an engineer on the renovation of the Omni Shoreham in Washington, D.C., has played a role in the restoration and addition of the U.S. Botanic Garden restoration and addition, and has been an engineer with construction management experience.



Stanley Hoffman, AICP;
Stanley R. Hoffman Associates, Los Angeles, CA

Stan brings over twenty-eight years experience in the fields of fiscal and financial analysis, economic and demographic studies, land use projections, real estate market research and computer-based fiscal modeling to the Kennewick UDAT Team. Stan has extensive experience in preparing market studies, financing studies and development impact fee programs. His major fiscal and financial analyses have included large-scale mixed use land developments in many jurisdictions throughout California.



Larry Morrison, AIA;
Principal, Arroyo Group, Pasadena, CA

Larry is a senior architect/urban designer who has prepared plans and urban designs for new towns, downtowns, transit-oriented development, historic preservation, economic revitalization and campuses for major cities and educational institutions throughout Southern California and Arizona. He was instrumental in creating Old Pasadena as a regional shopping/entertainment destination in Southern California.



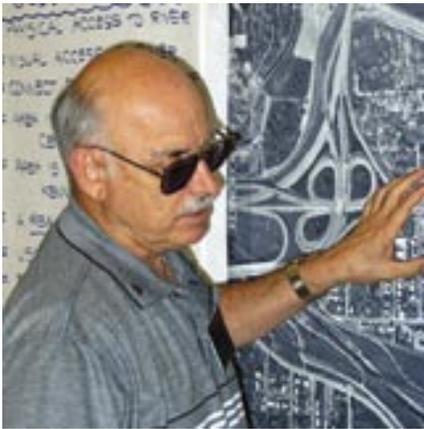
Julie Roberts,
Urban Designer, RNL, Denver, CO

Julie is an urban designer with RNL, where she has been working with Pat Dawe and the Urban Design/Landscape Studio since before her graduation. Among her current urban design assignments is as an urban designer on a 60 acre master plan in Downtown Las Vegas, a 23,000 acre new community master plan in Colorado for the Colorado Land Board, and numerous other landscape and planning projects in Colorado.



Soren Simonsen, AIA, AICP;
Principal, Cooper Roberts Simonsen, Salt Lake City, UT

Soren is an architect and planner with nineteen years of experience. He has a B. Arch. From the University of Texas, where his work also included urban design and regional planning. He has won a number of personal and firm awards for his work in Utah, including Governor's Quality Growth Awards for the Sandy Utah Downtown Master Plan and South Salt Lake City Transit-Oriented Development plans the Ogden Union Square Mixed Use Development, and Awards from the Utah chapter of APA for Sandy and South Salt Lake City.



Raymond Spano, AIA;
Principal, Spano Architects, Pasadena, CA

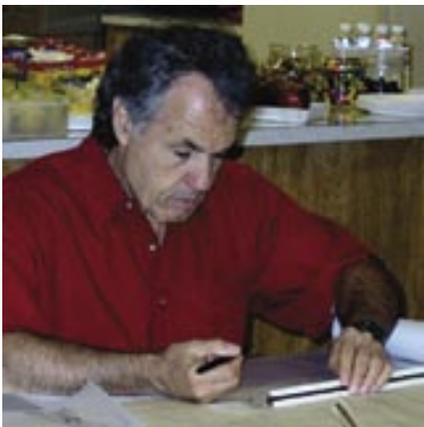
Ray has designed a variety of buildings ranging from restaurants, schools and churches to retail façade renewal, office buildings and residential projects. In his thirty seven years of experience beginning with William L. Pereira Associates, Ray has not only designed and master planned millions of square feet of new facilities, he is also become known as a skilled illustrator, communicating the features and the spirit of architectural and planning projects in three dimensions. Some of his notable projects in Southern California have been the renovation of the Pasadena Playhouse (the State Theatre of California), a number of downtown revitalization projects including Huntington Beach, Long Beach, El Monte, Azusa, Riverside, Burbank and Pasadena.



Jane Willeboordse, AIA;
Executive Director, Dundalk Renaissance Corporation, Dundalk, MD

Jane is an architect and public/private implementation expert who brings a depth of expertise in implementation and development action toward accomplishing goals in community involvement, urban infill projects, environment and preservation. Her community involvement experience is extensive. She has substantial experience as a planner and designer in the private sector and the non-profit sector.

Others who assisted the team at the UDAT Workshop



Ken Brooks, Architect,
Olympia, Washington

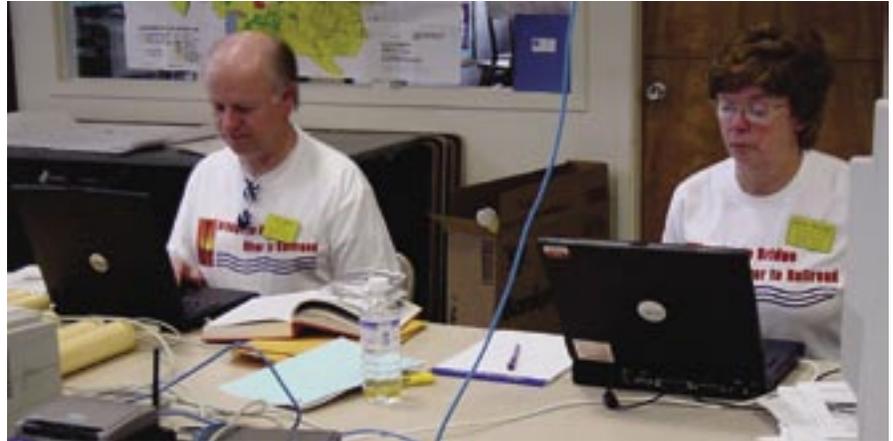


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Tom Moak and Nancy Burleigh



Larry Morrison explains his subgroup's vision for the riverfront to the UDAT Team. School children's renditions of their views of a revived waterfront encircle the meeting space at the First United Methodist Church.

