
5.2 Existing Trails & Trail Linkage Points

According to the Crosswicks Creek/Doctors Creek Greenway Plan, there are currently a small number of *existing* greenways and greenway trails in the surrounding watershed area as well as a number of *proposed* greenway trails within the watershed. Existing greenways described in the watershed plan include the Delaware and Raritan Canal State Park and the Crosswicks Creek Park.

The Delaware and Raritan Canal State Park is a 67-mile recreational corridor abutting the Delaware and Raritan Canal system. The 1,098-acre Crosswicks Creek State Park is owned by Monmouth County and is located in Upper Freehold Township.

The greenway plan further notes that the existing Crosswicks Creek Park forms a greenway along a substantial part of Crosswicks Creek in Upper Freehold, and Monmouth County is planning to expand this park as opportunities become available.

Other proposed greenways and trails noted in the Crosswicks Creek/Doctors Creek Greenway Plan and during the course of this study are as follows:

- **Crosswicks Creek Greenway Trail-** A proposed Hamilton Crosswicks Creek Linear park will follow Crosswicks Creek across the township and several easements have been secured for most of the length of the Crosswicks Creek through Hamilton. The trail will be used predominantly for pedestrian use.

The trail affords the possibility of a *direct* trail linkage with the Doctors-Assunpink Trail. This is an important linkage, as The Delaware and Raritan Canal State Park trail could very well be linked with a Doctors Creek Trail via the proposed Crosswicks Trail in the vicinity of the CSX rail area just west of Route 130 and south of Yardville-Allentown Road.

A potential linkage point is illustrated on the study area map (See Study Area West, Map 4). The trail linkage with the proposed Doctors Creek-Assunpink Trail, would enable access to the Delaware and Raritan Canal State Park, Crosswicks Creek Trail (Photo #37) the Hamilton-Trenton Marsh (Photo #38) and the Delaware River.



**Photo 5-37: Crosswicks Creek,
Hamilton Township, Proximate to
Groveville**
Photo: Walter Helfrecht



**Photo 5-38: Hamilton-Trenton Marsh,
Hamilton Township, Proximate to
Delaware River**
Photo: DRGP Website, Sojourn 2002

- **Delaware River Heritage Trail-** This proposed greenway trail is a National Park Service and Delaware River Greenway Partnership initiative. The trail concept calls for a fifty mile loop. Approximately half of the trail would be in New Jersey and the remaining portion in Pennsylvania. The trail will follow the Delaware River linking Trenton to Palmyra and the existing Delaware-Raritan Canal State Park (See Linkage Point, Study Area West, Map 4).
- **Walnford – Washington Greenway Trail-** The proposed Walnford to Washington Trail is a concurrent trail study effort being completed by members of the Crosswicks Creek/Doctors Creek Regional Greenway Planning Group (CCDC Planning Group). The trail is important as it affords the possibility of a *direct* trail linkage with the Doctors-Assunpink Trail.

The trail would have its northerly origin in Washington Township (Robbinsville), at the Washington Community Park, run easterly from the park via a bridge over the NJ Turnpike at Gordon Road, eventually continue along the Indian Run to the linkage with the Doctors Creek Allentown’s Heritage Park, would follow a couple of short local roadways to inter-tie with a soccer field, a multi-use recreational complex, and the Upper Freehold Regional School District campus.

The proposed route continues south along several local roadways (Photo # 39), and generally follows the path of the Crosswicks Creek. The southern terminus of the trail concludes at a vacated vehicular entrance to Historic Walnford Park in Upper Freehold Township located right on the Crosswicks Creek. It has a linkage with the Doctors Creek in Allentown Borough’s Heritage Park.

This potential interconnecting trail would allow trail users multiple destination options, a variety of terrain, and scenic appeal throughout the four seasons. (See Linkage Point, Study Area West & Central Maps 4-5).



Photo 5-39: Portion Proposed Walnford-Washington Trail, Allentown Borough and Upper Freehold Townships, Proximate to Breza and Ellisdale Roads.
Photo: Forbes Environmental

- **Monmouth County Union Transportation Trail** – The County of Monmouth was granted an easement and entered into a license agreement with the Jersey Central Power and Light Company (then GPU Energy) on October 30, 1998 for development of a public trail within the Old Union Railroad Right-of-Way.

Nearly 9 miles in length from the Monmouth/Mercer county line within the Assunpink Wildlife Management Area in the Township of Millstone to the Monmouth/Ocean border at County Route 537 in Upper Freehold Township, the right-of-way is intact except for a 3708 linear foot section just north of Davis Station Road.

The multi-use trail will be developed and managed by the Monmouth County Park System as the Union Transportation Trail. The project is currently in the planning and pre-engineering phase. Land acquisition to get past the missing piece of right-of-way is in progress. Bridge reconstruction and installation of marked street crossings must be designed, approved by state regulatory agencies, and authorized by JCP&L before construction can begin and the facility can be opened to the public (Photo #40. See Linkage Point, Study Area Central & North Maps 5 & 7).



Photo 5-40: Portion Proposed Union Transportation Trail, Upper Freehold Township, Proximate to Davis Station Road and Route 539. Forbes Environmental & Land Use Planning

- **Millstone Township Greenway Trail (“Assunpink Trail Loop”)** - Millstone Township adopted an open space plan and open space system map illustrating a greenway trail that would provide uninterrupted pedestrian, bicycle or equestrian movement and tie state, county, and municipal parks together. The portion of the proposed greenway system in the southwestern portion of the township forms a loop, intersects with the Doctors Creek in the vicinity of Route 526, and would enable a linkage between the Doctors Creek and Assunpink Creek (Photo #41. See Linkage Point, Study Area East Map 6).



Photo 5-41: Portion Proposed Millstone Township Greenway Trail (Assunpink Creek Trail Loop”), Millstone Township, Proximate to Red Valley Road
Photo: Dillon Torno

- **Missing Link Greenway-** This proposed greenway trail would connect all of the existing open space within the Assunpink-Wildlife Management Area through Washington Township (See Linkage Point, Study Area North, Map 7).
- **Camden-Amboy Trail Line-** This proposed greenway trail would connect Washington Township to Bordentown Township as it would run alongside the Miry Run and the Assunpink Creek. It would thereby link Windsor, Robbinsville, Hightstown and Bordentown (See Linkage Point, Study Area North, Map 7).
- **Trenton-Assunpink Greenway-** This proposed greenway trail would connect the City of Trenton to the Assunpink Creek in Hamilton Township (See Linkage Point, Study Area North, Map 7).

5.3 Trail Feasibility Alternatives

The information noted previously in this study set the groundwork required to begin determining the feasibility of various trail alternatives within the study area. The definition of *feasibility* selected is *the determination of the degree to which something can be carried out*. In the case of this trail feasibility study, the tasks selected for this project and the information collected were intended to assist with determining *whether or not a Doctors Creek-Assunpink Creek Trail is viable, possible, probable or practical* in the selected project area.

By way of review, the information gathered and presented in previous sections of this study are the criteria for determining trail feasibility. The criteria applied to each proposed trail alternative are as follows:

- **Crosswicks Creek-Doctors Creek Greenway Plan-** Information included goals, objectives and recommendations contained and adopted in the greenway plan, and supportive of the development of a Doctors-Assunpink Trail. Many of the policies in the plan were adopted by the Crosswicks Creek-Doctors Creek Regional Planning Group (CCDC Greenway Group) and now Allentown Borough. The CCDC agreed that the selected trail alternative would be the one most consistent with the overriding policies within the guiding watershed plan.
- **Crosswicks Creek-Doctors Creek Regional Planning Group-** As the CCDC Planning Group has successfully completed a number of beneficial projects, it is expected that they will successfully implement the recommendations included in this study.

- **Accepted Definitions-** It was important to obtain concurrence by CCDC Planning Group members for selected definitions of “greenway” and “greenway trail”. The Group desires a low impact trail that will protect the environment, offer a superb recreational opportunity, and provide benefits to landowners adjoining the creek.
- **Projected Trail Development Impacts-** The CCDC Planning Group acceptance of projected positive and negative impacts to the natural, recreational and historical resources in the project area and associated with the selected trail route was an important facet of this project. The Group desires a trail route and trail type with the least number of negative impacts and the highest number of positive impacts.
- **Landowner & Citizen Input-** The CCDC Planning Group implemented a number of public outreach efforts and considered/applied all comments received from landowners, citizens, elected and appointed officials received during the course of this study. The Group desires the alternative that is most consistent with input received during the course of this feasibility study.
- **Physical Features-** The CCDC Planning Group considered the existing topography, natural and man-made obstructions, land use, and transportation corridors within the project area. The committee would select a trail alternative having the least possible impact to physical features.
- **Existing Open Space (Park and Open Space Land Ownership) -** The CCDC Planning Group took into account the presence of preserved land (e.g., state, county and municipal land) and the rules and regulations guiding use on these parcels. The selected trail alternative would avoid those parcels with rules and regulations prohibiting trails (e.g., presently farmland preserved).
- **Planning Policies-** The CCDC Planning Group considered existing regional and local master planning policies supporting greenway and greenway trail development. The Group would select the trail alternative most consistent with municipal policies supporting recreational trail development and environmental protection.
- **Land Use Regulations-** The CCDC Planning Group noted the existence and location of municipal zoning districts, principal permitted uses within each zoning district, and land use regulations guiding environmentally-sensitive land.

The selected a trail alternative would need to be consistent with the zoning ordinances and regulating land use in Allentown Borough and Hamilton, Upper Freehold and Millstone Townships.

- **Economic Parameters-** The CCDC Planning Group recognizes there will be significant financial needs associated with each proposed trail alternative, and that some projections would need to be made at the feasibility stage (e.g., \$10,000.00 to \$40,000.00 per mile). They would select the trail alternative with the least number of projected stream crossings (e.g., permits), materials (e.g., length of trails, number of stream crossings), and other related costs (e.g., professional and legal time required to negotiate trail easements).

It is important to again note that a full-fledged, parcel-by-parcel feasibility analysis was beyond the scope of this project. A more comprehensive, parcel-by-parcel analysis is usually part of a Master Trail Plan. However, as part of this initial trail feasibility analysis, the listed parameters were applied to three potential trail alternatives. They are described in more detail in the following subsections.

Alternative #1, Physical Features Alternative ***(North Side Doctors Creek)***

Overview of Trail Alternative #1

The first alternative is primarily based upon physical features. The primary tools applied toward determining the feasibility for this trail alternative included land cover information (2002 aerial photographs, NJDEP), the location of the 100-year floodplain (2005, NJ Geographic Information Network) and topography (monochromatic topographic images, NJ Geologic Survey). After the trail was placed using physical features, the other criteria were applied as well.

The chosen path for the first alternative is based on physical features including land cover, floodplains, and topography. The alternative is located within the 100 year floodplain. In addition, the trail avoids obstructions (e.g. densely wooded areas, housing developments, water bodies) and generally stays to the north side of the Doctors Creek and the south side of the Assunpink Creek.

Hamilton Township

In Hamilton Township, the proposed Doctor's-Assunpink Creek Trail connects with the proposed Crosswicks Creek Trail on private property between the CSX railroad and Route 130. The trail alternative skirts the northern side of Doctors Creek for the entire route through Hamilton Township to the Upper Freehold municipal line at Extonville Road.

In this particular segment the trail follows the lay of the land (e.g., flat topography and floodplain) and avoids areas that are densely wooded. The trail alternative travels through mostly private land, and through five parcels preserved via the state Farmland Preservation Program, and four municipally-owned parcels.

Allentown Borough

In Allentown Borough, the proposed trail alternative remains on the gently sloping floodplains on the northern side of the Doctors Creek. The proposed trail would connect to the Walnford to Washington Trail just on Breza Road. It would continue along the northern side of the Creek to the Upper Freehold Township municipal line. This segment avoids developed and densely wooded areas, and travels through three municipally owned parcels. In this segment, the majority of the trail alternative would pass through privately owned land.

Upper Freehold Township

In Upper Freehold Township, trail alternative #1 continues on gently sloping floodplains on the northern side of Doctors Creek connecting with the proposed Monmouth County Transportation Trail just east of Sharon Station Road. This trail alternative crosses over the Main Stem Doctors Creek at Route 43, eventually connecting with the proposed Millstone Township Greenway Trail (e.g., “Assunpink Trail Loop”) in the vicinity of the Millstone Township municipal line.

In this segment, the trail avoids development and densely wooded areas. The trail alternative crosses over the Creek at Route 43 in order to avoid a small developed area, and connects with existing trails at Monmouth County’s Clayton Park. It also connects with the Millstone Township Greenway (Assunpink Trail) which lies south of the Creek. In this segment, the trail alternative crosses predominantly private land, the state-owned Imlaystown Lake, three parcels preserved through the Farmland Preservation Program, and Monmouth County’s Clayton Park.

Millstone Township

The proposed Millstone Township Greenway plan was described previously in this feasibility study. As Millstone Township formally adopted an open space system map illustrating this portion of their greenway trail, we have assumed the trail is feasible based on parameters previously applied by the Township’s trail planning consultant.

This portion of the proposed Millstone Township Greenway Trail forms a loop in the southwestern portion of the township and intersects with the proposed Doctors Creek Trail in the vicinity of Route 526.

Both the western and eastern portions of the loop follow the two tributaries of the Doctors Creek, travels through privately owned land, two state-owned parcels (western loop, Yellow Meeting House Road), one municipal parcel (eastern loop, north of route 526 and parallel to Route 526) and links with the Assunpink Creek within the state-owned Assunpink Wildlife Management Area just below Route 571.

Millstone/Upper Freehold/Washington Townships

The proposed trail alternative is located primarily within the Assunpink Wildlife Management Area (WMA), and continues westward on gently sloping floodplains located on the southern side of the Assunpink Creek. It remains in the WMA traveling west along the south side of Assunpink Lake linking again with the proposed Monmouth County Transportation Trail just south of Route 539. In Washington Township, the trail passes through two Farmland Preservation Program Parcels and continues along the southern side of the Assunpink Creek, where the study area ends at Route 130. This is also the location of another potential trail linkage within the “Missing Link Greenway” as well as other trails in this vicinity and noted previously in this feasibility study.

Feasibility of Trail Alternative #1, North Side Doctors Creek-

It was determined, based primarily on where the physical parameters end up placing the trail route, that trail alternative #1 is most likely not feasible. Utilizing the physical parameters, the trail alternative would require that the majority of the trail utilize private land and too many parcels previously preserved through the Farmland Preservation Program.

Again, this alternative follows the gentlest topography, which is located on the northern side of the Doctors Creek. The most gentle, least sloping topography is also within the 100 year floodplain. Although several smaller trails in the region and throughout New Jersey are located on the 100 year floodplain, the local planning policies and regulations (see Section 4) don't consistently support trail development within the 100 year floodplain (e.g., Hamilton Township and Allentown Borough). The local ordinances tend to guide trail development away from the floodplain and into the floodway and flood fringe areas. It is certainly *possible* to obtain variances for a continuous low-impact trail within the floodplain; however this analysis is attempting to find the most feasible alternative.

Further, although the Farmland Preservation Program *does* support trail opportunities on preserved farms where appropriate, upfront planning to include trail easements and trail access must take place *before* the land is preserved. Once a farm is preserved, another easement cannot be conveyed granting access for trail purposes, because it would violate the farmland preservation deed of easement.

Although limited opportunities for placement of trail easements have been included on some of the farmland preserved parcels in the project area (e.g., Lengyen and Hunt farms in Hamilton Township), trail easements are not in place on the majority of farmland preserved parcels in the path of trail alternative #1. Table 6 on the next page provides a feasibility analysis overview associated with Trail Alternative #1.

Table 6, Feasibility Matrix, Alternative #1, North Side Doctors Creek-

Feasibility Parameter	Notes	Feasibility Determination *
Crosswicks Creek-Doctors Creek Greenway Plan	Goals, Objectives and Recommendations in the watershed plan are supportive of trail development as proposed in this alternative.	+ Parameter Met
CCDC Group	The success rate of CCDC sponsored projects and confidence in implementing this alternative.	+ Parameter Met
Accepted Definitions for Greenway & Greenway Trails	CCDC definition of greenway, greenway trail, and recreational trail as applied to this alternative.	+ Parameter Met
Projected Trail Development Impacts	CCDC acceptance of positive and negative impacts associated with this alternative.	- Parameter Not Met due to Potential Floodplain Impacts
Landowner & Citizen Input	CCDC concurrence that (based on input received) the public would support this alternative.	- Majority of Land On Private Parcels. Landowner Support Not Likely
Physical Features	CCDC concurring that selected alternative will have the least impact upon physical features.	+ Selected Alternative Follows Lay of the Land & Avoids Steep Slopes and Obstructions
Existing Open Space	CCDC concurrence that alternative avoids parcels with rules and regulations prohibiting Trails.	- Selected Alternative Requires Trail On Farmland Preserved Parcels Where Negotiating New Easements Would be Difficult.
Municipal Planning Policies	Goals, Objectives and Recommendations in municipal plans are supportive of trail development as proposed in this alternative.	- Four Municipal Master Plans and Functional Plans Do Not Support Impacts to One-Hundred Year Floodplain
Municipal and Other Land Use Regulations	Local zoning and land use regulations are supportive of this alternative.	+/- Four Municipal Zoning Ordinances Allow Some Recreational Uses Land Development Ordinances Do Not Entirely Support Trails on 100 year Floodplain. More Study Required.
Economics/General Cost	The projected costs for this alternative deemed acceptable by CCDC.	+/- Alternative is approximately 21 miles. Calls For Minimal Crossings. More Study Required
Overall Feasibility Score **		4 +, 4-, 2+/-

Notes:

* The + symbol signifies the parameter has been generally met thereby signifying the trail would be possible and meets the criteria for this particular parameter. The symbol - signifies the parameter has not been met and is most likely not possible as it does not meet the criteria for this particular parameter. +/- indicates more study required at trail master plan stage.

** Parameters not all weighted equally for alternative #1. This alternative placed due to physical parameters, and then the remaining criteria are applied.

Alternative #2, Physical & Social Features Alternative ***(South Side Doctors Creek)***

Overview of Trail Alternative #2

The second alternative is based on physical features (e.g., land cover, floodplains, and topography) as well as open space land ownership (category and ownership of open space), general zoning and land development regulations (e.g., floodplain and stream corridor protection), rules and regulations guiding trail development on land owned by particular government entities (e.g., municipalities, state farmland preservation program, county land, state land) and the remaining feasibility criteria.

Hamilton Township

Like the first proposed alternative, Trail Alternative #2 would connect with the proposed Crosswicks Creek Trail on land under the ownership of the State for the Delaware and Raritan Canal. However, Alternative #2 begins on the south side of the Doctors Creek, and at least 75' outside of the one-hundred year floodplain as trails on floodway and flood fringe areas are more supported by municipal land use regulations.

The proposed alternative remains on the south side of the creek crossing Route 130, Church and Broad Streets, passing through municipal-owned land just east of Broad Street, and then several additional privately-owned parcels before crossing/utilizing Groveville-Allentown Road. The Trail alternative would require a stream crossing at Groveville-Allentown Road to avoid farmland preserved parcels (Doerler Farm/Crosswicks Tree Farm) and to utilize Hamilton Township's stream corridor easement on the north side of the creek. Once through the easement, the proposed trail would remain on the north side of Doctors Creek crossing over again to the Lengyen Farm, which is in the farmland preservation program, but is reported to have a trail access easement.

The proposed trail alternative would continue on the south side of the creek crossing Tattletown Road, and utilizing county and township-owned preserved land. Trail Alternative #2 would remain on the south side of the Creek providing a scenic vista along the "glen", passing through several privately-owned parcels and traversing Extonville Road, a tributary to Doctors Creek, Route 524, a small portion of Upper Freehold Township, a linkage with the proposed Walnford-Washington Trail, and would then cross into Allentown Borough.

Allentown Borough

After linking with the proposed Walnford-Washington Trail, proposed Trail Alternative #2 would cross the Creek in the vicinity of Breza and Ellisdale Roads to the north side of the Doctors Creek. The trail would remain outside of the one hundred year floodplain and would traverse municipal and private land. It would continue through the south side of Heritage Park and onto historic Main Street, and continue into Sensi Park/Allentown Lake. The proposed trail would then traverse the steep slopes located on the south side of park and Allentown Lake and continue along the south side of Allentown Lake and into Upper Freehold Township. This area is known for its scenic vistas.

Upper Freehold Township

In Upper Freehold Township, the proposed trail route would continue along the south side of Allentown Lake thereby passing through newly purchased Monmouth County Parkland (former site of 1985 Allentown Lake dredging stockpile and opposite Winchester Estates). The trail would remain beyond the one-hundred year floodplain and on the south side of the creek passing through a large number of privately held parcels. The proposed trail would cross a tributary running parallel to the Doctors Creek before reaching Sharon Station Road. Just east of Sharon Station Road, the proposed Doctors-Assunpink Trail would utilize a newly acquired Monmouth County Parkland parcel, cross two tributaries, and would link with the proposed Monmouth County Transportation Trail. East of the trail linkage, the Doctors-Assunpink Trail remains on the south side of Doctors Creek before traversing state-owned west of Davis Station Road, additional state land at Imlaystown Lake in the historic district and then into County owned land (Clayton Park).

The proposed trail would then link with existing trails at Clayton Park and would remain on the south side of the Doctors Creek and almost entirely on Monmouth County land. As a sizable farmland preserved parcel is located just east of Clayton Parkland, the proposed trail would cross the Doctors Creek and follow a tributary to the creek until reaching Route 526. The proposed trail would need to follow Route 526 for approximately 2,500 feet before linking with the proposed Millstone Township Greenway Trail (“Assunpink Loop”) just beyond Yellow Meeting House Road.

Millstone Township

As noted in the section describing Alternative #1, Millstone Township formally adopted an open space map and a proposed greenway trail. We are assuming the link to this portion of the trail is feasible based on physical features and land ownership. Therefore the second alternative again utilizes the western and eastern portions of the loop, skirting the two tributaries of the Doctors Creek, and traveling through privately owned land, two state-owned parcels, and one municipal parcel and finally linking the Doctors Creek with the Assunpink Creek within the state-owned Assunpink Wildlife Management Area just below Route 571.

Millstone/Upper Freehold/Washington Townships

The trail segment, within the Assunpink Wildlife Management Area (WMA), would follow the same route as proposed Alternative #1. It would continue westward, but would be developed beyond the one-hundred year floodplain and on the southern side of the Assunpink Creek if required by NJDEP.

Alternative #2 would remain in the WMA traversing land on the south side of Assunpink Lake linking again with the proposed Monmouth County Transportation Trail just south of Route 539. As noted previously there are two farmland preserved parcels east of the proposed Monmouth County Transportation Trail. There would be a need to avoid these parcels due to existing easement restrictions, so this alternative would require that the trail follow Route 539 and Sharon Road before again linking with the Assunpink Creek at Allen's Road and continuing on state-owned land to Route 130 where the project area ends. At Route 130, there is another trail linkage opportunity (e.g., "Missing Link Greenway" and other trails). These opportunities were previously described.

Feasibility of Trail Alternative #2, South Side Doctors Creek-

It was determined, based on the ten (10) feasibility parameters that Alternative #2 is more feasible than alternative #1. However, it would also present a number of difficult development challenges. For instance, the alternative would require at least eight (8) creek and creek crossings, and use of several busy roadways in order to bypass farmland preserved parcels. Although the required creek crossings provide the opportunity to utilize parcels currently owned and managed by government groups, this option would also require "buy in" from a large number of private landowners. These issues are not impossible to surmount, but will require additional study and significant public outreach (See Section 6, Conclusions & Implementation Strategies). The table on the next page provides an analysis of feasibility associated with Trail Alternative #2.

Table 7, Feasibility Matrix, Alternative #2, South Side Doctors Creek-

Feasibility Parameter	Notes	Feasibility Determination *
Crosswicks Creek-Doctors Creek Regional Greenway Plan	Goals, Objectives and Recommendations in the watershed plan are supportive of trail development as proposed in this alternative.	+ Parameter Met
CCDC Greenway Group	The success rate of CCDC sponsored projects and confidence in implementing this alternative.	+ Parameter Met
Accepted Definitions for Greenway & Greenway Trails	CCDC Definition of greenway, greenway trail, and recreational trail as applied to this alternative.	+ Parameter Met
Projected Trail Development Impacts	CCDC acceptance of positive and negative impacts associated with this alternative.	+ Parameter Met Although some Impacts to Floodway and Flood Fringe Ecology Expected
Landowner & Citizen Input	CCDC concurrence that (based on input received) the public would support this alternative.	+/- Significant Number of Private Parcels Required. Immediate Landowner Support Not likely. More Study & More Outreach Required
Physical Features	CCDC concurring that selected alternative will have the least impact upon physical features.	+/- Alternative Traverses Steeper Sloped Areas than Alternative #1. Scenic vistas, but requires use of roadways and Additional Stream Crossings. More Study Required.
Existing Open Space	CCDC concurrence that alternative avoids parcels with rules and regulations prohibiting Trails.	+ Alternative Avoids Farmland Preserved Parcels & Utilizes Government Owned Parcels
Municipal Planning Policies	Goals, Objectives and Recommendations in municipal plans are supportive of trail development as proposed in this alternative.	+ Four Municipal Master Plans and Functional Plans Support Trails
Municipal and Other Land Use Regulations	Local zoning and land use regulations are supportive of this alternative.	+ Four Municipal Zoning and Land Development Ordinances More Supportive of Parks and Trails Outside of 100 Year Floodplain
Economics/General Cost	The projected costs for this alternative deemed acceptable by CCDC group.	- Alternative approximately 22 miles. Calls For At Least 8 Crossings and a longer trail.
Overall Feasibility Score		7+, 1-, 2+/-

Notes:

* The + symbol signifies the parameter has been generally met thereby signifying the trail would be possible and meets the criteria for this particular parameter. The symbol – signifies the parameter has not been met and is most likely not possible as it does not meet the criteria for this particular parameter. +/- indicates more study required at trail master plan stage.

Alternative #3 ***(Water Trail)***

Although we typically think of trails as being on land, a water trail (e.g. “Blue Trail) is the third possible alternative. An accepted definition of *water trail* is a stretch of river or other water body that has been mapped out with the intent to create an educational, scenic, and challenging experience for recreational canoeists and kayakers. In fact, like a hiking trail, a water trail can provide varying degrees of challenge and provide a variety of recreational, historic and environmental experiences.

The third alternative (See Maps 4-7, Study Area Maps, Trail Alternative #3) was based on the physical features associated with stream access (e.g., location, approximate mileage between access points, topography, ownership, availability of parking) and applicability of feasibility criteria applied to the two land trail alternatives.

Overview of Trail Alternative #3, Water Trail-

Hamilton Township

This section of the Main Stem of the Doctors Creek is most likely navigable in season and with adequate precipitation. The section may also be accessed in at least four (4) places within the Township. Access points recommended for development would require parking, and low-impact launching areas. The potential access points include (west to east based on the direction of water flow):

- **Hidden Hollow Road Development-** Access is possible via the Township eased land on the south side of Doctors Creek in the Hidden Hollow Road residential development.
- **Tattletown Road-** Another possible access would be via Tattletown Road or the township easement just east of Tattletown Road.
- **Groveville Allentown Road-** Access is possible via Groveville-Allentown Road utilizing a township corridor easement for launching.
- **Highland Avenue Vicinity-** An access possibility would be township land on the north side of the creek utilizing an existing residential development west of the railroad tracks and D& R Canal land. Accessing here might allow a creek journey to the confluence of the Doctors Creek and Assunpink Creeks, through the Hamilton-Trenton Marsh and out to the Lower Delaware River.

Allentown Borough

This section of the Main Stem of the Doctors Creek is most likely navigable in sections and with adequate precipitation. In addition, recreational boating is fairly common in Allentown Lake via private properties on the north side and Pete Sensi Park on the south side. The Pond was created with a dam, and that dam is a major obstruction to potential paddlers.

The section may also be accessed in at least three (3) places within the Borough although two access points would require parking and low-impact launching areas (Pete Sensi Park has existing parking and launching opportunities). The potential access points are:

- **Breza Road-** There is a potential access point from Breza Road and Allentown Borough land just below Heritage Park and the municipal sewage treatment facility.
- **Heritage Park-** There is a potential access point from the southeastern corner of Heritage Park on the north side and beyond the privately owned mill.
- **Pete Sensi Park-** Access to Allentown Lake is currently gained through the parking lot at Pete Sensi Park. A boater wishing to go further would need to drive to the access on Breza Road or portage around the dam and again enter the Doctors Creek utilizing Heritage Park.

Upper Freehold Township

This section of the Main Stem of the Doctors Creek is not as navigable as the Allentown Borough and Hamilton Township segments. The Doctors Creek is too narrow and contains softer substrate in this particular section. The section would prove very challenging even with adequate precipitation.

Within the Township, Imlaystown Lake is currently popular with recreational boaters. However, local citizens have reported environmental impacts due to excess nitrogen and phosphorus. By mid-August, the lake is quite overgrown with plant life. However, the County has plans to develop access on the north side of the lake.

Although most likely not navigable, this section could be accessed in at least four (4) places within the Township. The potential access points are:

- **Clayton Park-** The County owns several parcels along Route 526 on the northern part of Doctors Creek. Parking and low-impact launching would be required.

- **Imlaystown Lake-** As noted previously boating on Imlaystown Lake is currently popular and the county has recently purchased land on Route 526 on the northern side of the lake. Additional parking would be required, and the dam would need to be by-passed by paddlers wishing to continue a journey down stream to other potential access points. A portage around the dam, over Davis Station Road, and then utilizing the access point on state owned land (e.g., south side of the Creek) would be required.
- **Sharon Station Road** – The County recently purchased a property on Sharon Station Road. Access via this property is possible; however parking and low-impact access would be required.
- **Conine’s Mill Pond/Allentown Lake-** Monmouth County recently purchased additional property on Route 539 on the south side of Allentown Lake. Access via this property may be possible. The development of parking and low-impact access would be required.

Millstone Township

This section of the Main Stem of the Doctors Creek is not navigable as the Assunpink and Doctors Creek tributaries within the Township are too narrow and not deep enough for canoes and kayaks. In addition, there are several lakes (e.g., Red Valley Lake) and ponds in the tributary sections and the dams obstruct navigability further.

Millstone/Upper Freehold/Washington Townships

Remaining water trail opportunities in this section are somewhat feasible as the three major lakes all have existing boat access areas. However the tributaries connecting the smaller lakes to the larger Lake Assunpink are not entirely navigable. Although the main stem becomes wider and deeper west of the Lake Assunpink Dam, it is not navigable for very long west of the dam.

For instance, an uninterrupted paddle west from smaller the smaller lakes to the larger Assunpink Lake would be very challenging due to existing physical constraints (e.g., narrow, low levels, dense vegetation). Once in the larger lake, there is also the challenge presented by the Assunpink Lake Dam. However portaging around the dam and accessing the main stem east of Eglington Road may be a possibility.

Feasibility of Trail Alternative #3, Water Trail-

It was determined, based on the feasibility parameters that Alternative #3 may be feasible in the following two sections:

- **Doctors Creek Water Trail-** Doctors Creek from Allentown Lake to the end of the project area and potentially out to the Delaware River.
- **Assunpink Creek Water Trail-** Assunpink Lake to Route 130.

Both trails would require the formal development of a number of parking facilities and low impact creek access as well as the support of adjacent land private and public landowners. Additional study is required to determine full feasibility, and the realization that the level and flow of the creeks are not consistent throughout the seasons.

In addition, this alternative is not as feasible as Alternative #2 as it does not cover the entire project area, and the number of natural and man-made obstructions (e.g., approximately 5 known dams) should be more comprehensively studied.

The table on the next page provides an analysis of feasibility associated with Trail Alternative # 3.



**Photo 5-42: Delaware Water Trail,
Proximate to Trenton Falls, Trenton, NJ
Photo: Andy Smith**

Table 8, Feasibility Matrix, Alternative #3, Water Trail-

Feasibility Parameter	Notes	Feasibility Determination *
Crosswicks Creek-Doctors Creek Regional Greenway Plan	Goals, Objectives and Recommendations in the watershed plan are supportive of trail development as proposed in this alternative.	+ Parameter Met
CCDC Greenway Group	The success rate of CCDC sponsored projects and confidence in implementing this alternative.	+ Parameter Met
Accepted Definitions for Greenway, Greenway Trail & Water Trail	CCDC Definition of blue trail, and recreational trail as applied to this alternative.	+ Parameter Met
Projected Trail Development Impacts	CCDC acceptance of positive and negative impacts associated with this alternative.	+ Parameter Met Although some Impacts associated with access and parking facilities is expected
Landowner & Citizen Input	CCDC concurrence that (based on input received) the public would support this alternative.	+/- Support from all adjacent landowners is required. More Study & More Outreach Required
Physical Features	CCDC concurring that selected alternative will have the least impact upon physical features.	- Alternative May Require Land "Trespass" As Numerous Obstructions Expected. Alternative Does Not Cover Entire Project Area
Existing Open Space	CCDC concurrence that alternative avoids parcels with rules and regulations prohibiting Trails.	+ Alternative Utilizes Public Land and Existing ROWs for Access and Parking.
Municipal Planning Policies	Goals, Objectives and Recommendations in municipal plans are supportive of trail development as proposed in this alternative.	+ Four Municipal Master Plans and Functional Plans Support Trails & Increased Recreational Opportunities.
Municipal and Other Land Use Regulations	Local zoning and land use regulations are supportive of this alternative.	+ Four Municipal Zoning and Land Development Ordinances Generally Allow for Creek Access.
Economics/General Cost	The projected costs for this alternative deemed acceptable by CCDC group.	+/- Alternative approximately 19 miles. Calls For Development of Access, Signage, and Parking Facilities. More Study Required.
Overall Feasibility Score		7+, 1-, 2+/-

Notes:

* The + symbol signifies the parameter has been generally met thereby signifying the trail would be possible and meets the criteria for this particular parameter. The symbol - signifies the parameter has not been met and is most likely not possible as it does not meet the criteria for this particular parameter. +/- indicates more study required at trail master plan stage.

The following table provides a comparison between the three alternatives and illustrates that Alternative #2 is the most feasible.

Table 9, Feasibility Matrix, Alternative Comparison-

Feasibility Parameter	Alternative #1 North Side Doctors Creek	Alternative #2 South Side Doctors Creek	Alternative #3 * Water Trail
Crosswicks Creek-Doctors Creek Regional Greenway Plan	+	+	+
CCDC Greenway Group	+	+	+
Accepted Definitions for Greenway, Greenway Trail & Water Trail	+	+	+
Projected Trail Development Impacts	-	+	+
Landowner & Citizen Input	-	+/-	+/-
Physical Features	+	+/-	-
Existing Open Space	-	+	+
Municipal Planning Policies	-	+	+
Municipal and Other Land Use Regulations	+/-	+	+
Economics/General Cost	+/-	-	+/-
Comparative Tally	4 +, 4-, 2+/-	7+, 1-, 2+/-	7+, 1-, 2+/- *

** NOTE: Although Trail Alternative #3 (Water Trail) indicates that it meets more criteria similar to selected alternative, , it was eliminated as the navigable portions of the waterway cover only a small portion of the project area.*

Insert Maps 4-7