

Agenda
Board of Supervisors
Isle of Wight County
August 5, 2021

1. Call to Order (6:00 P.M.)
2. Invocation
3. Approval of Agenda
4. County Administrator's Report
 - A. Irrigation Meters
Discussion of Providing Residential Irrigation Meters
 - B. Route 10 Waterline
Discussion of Revision of the Water and Sewer Ordinance re:
Connection Fees
 - C. Solar/Renewable Energy
Discussion of Solar/Renewable Energy
 - D. COVID-19 Update
Update of COVID-19 Response Efforts
 - E. American Rescue Plan Act
Discussion of American Rescue Plan Act Funding Options
 - F. Board of Supervisors' Retreat
Discussion of Holding a Strategic Planning Retreat
5. Closed Meeting
6. Adjournment

ISSUE:

Discussion of Providing Residential Irrigation Meters

BACKGROUND:

Currently, the County does not offer irrigation meters to residential water customers. An informal survey of some other communities in Hampton Roads revealed that irrigation meters where the sewer and HRSD bills are excluded from irrigation usage are offered.

The Board may wish to discuss and consider offering irrigation meters to its residential water customers.

BUDGETARY IMPACT:

None.

RECOMMENDATION:

Per the Board's discussion and direction.

ISSUE:

Discussion of Revision of the Water and Sewer Ordinance re: Connection Fees

BACKGROUND:

Staff will provide a brief presentation regarding the current County ordinance relative to connection fees and its compatibility with policies, procedures, and field practices.

BUDGETARY IMPACT:

None.

RECOMMENDATION:

Per the Board's discussion.

ISSUE:

Discussion of Solar/Renewable Energy

BACKGROUND:

In January 2021, the Board directed staff to develop a report and map showing where the most attractive areas of the County are for utility scale facilities and the potential maximum area devoted to these uses.

Staff recently completed a report responsive to the Board's direction. The Board may wish to discuss the report and its wish for how to address future solar/renewable energy projects.

BUDGETARY IMPACT:

None.

RECOMMENDATION:

Per the Board's discussion and direction.

ATTACHMENTS:

Description	Type	Upload Date
Solar Facility Staff Report	Backup Material	7/30/2021



MEMORANDUM

July 27, 2021

TO: Honorable Members of the Isle of Wight County Board of Supervisors

FROM: Amy Ring, Community Development Director

SUBJECT: Considerations for Solar Farm Conditional Use Permit Applications

In January 2021, the Board of Supervisors directed staff to develop a report and map showing where the most attractive areas of the County are for utility scale facilities and the potential maximum area devoted to these uses. Questions from the Board included how much of this potential area included prime agricultural lands, and whether there should be a cap on the total number of prime farmland acres removed for the purpose of developing a solar facility in order to preserve the County's agricultural industry and rural character.

Background

Since the approval of its first utility scale solar facility in September 2015 with the project known as the Woodland Solar Farm, Isle of Wight County continues to capture the interest of utility scale solar facility development due to the existence of medium and high voltage transmission lines and related infrastructure, its rural, relatively flat landscape, and supply of available property. In the years since the first facility was built, the community has taken several steps to reduce the potential negative impact of these facilities on its traditional agricultural and silvicultural economic base while maintaining flexibility for property owners and accommodating the development of a renewable energy source.

The County included a discussion of site considerations for utility scale solar energy facilities in Chapter 8 of its new Comprehensive Plan, *Envisioning the Isle*, adopted in January 2020. These siting considerations included the following recommended actions to accommodate these facilities while reducing any potential negative impacts:

- Research appropriate target density parameters for future facilities to mitigate the impacts related to the scale of these facilities;
- Set a maximum percent usage of assembled property to mitigate impacts to habitat, soil erosion, and stormwater runoff;

- Require facilities to be located adjacent or close to existing electric transmission lines;
- Require facilities be located outside of DSDs;
- Avoid or minimize impact to prime farmland or farmlands of statewide importance as defined by the USDA and Commonwealth of Virginia, respectively; and
- Facilities should be located outside of the viewshed of any scenic, cultural, or recreational resources (i.e., solar facilities may not be seen from surrounding points that are in line-of-sight with a resource location) or within the Highway Corridor Overlay district.

With these recommendations in mind, the Board of Supervisors subsequently adopted revisions in March 2020 to Section 5-5003.M.4 of the Zoning Ordinance to add performance criteria for utility scale solar facilities such as increased landscaping and setbacks, transportation plans, visual impact analysis, environmental and historic resource impact analysis, soil contaminant testing, noise limits, decommissioning criteria, and height limits for equipment.

Utility scale solar energy facilities, also commonly known as “solar farms,” require a conditional use permit (CUP) in all zoning districts, except the Planned Industrial District where it is permitted by right. The CUP application process gives the ability to evaluate the impacts of these facilities on a case-by-case basis, as each proposed location is unique. In addition, CUPs require a public hearing for both the Planning Commission and Board of Supervisors which allows citizens to voice their concerns to the governing body which could then be addressed as a condition of approval.

Solar Facility High Probability Areas

According to academic and industry research, preferred locations for utility scale solar facilities include properties within two miles of a transmission line or substation, but no further than five miles away. Conversations with industry representatives reveal that they may be willing to search for sites as far as ten miles away from these lines, if the cost of land, favorable local approval process, and the number of willing property owners make it cost effective, but that these instances are rare. Other favorable site characteristics include those properties which have few residences nearby and few potential environmental or historical resource impacts.

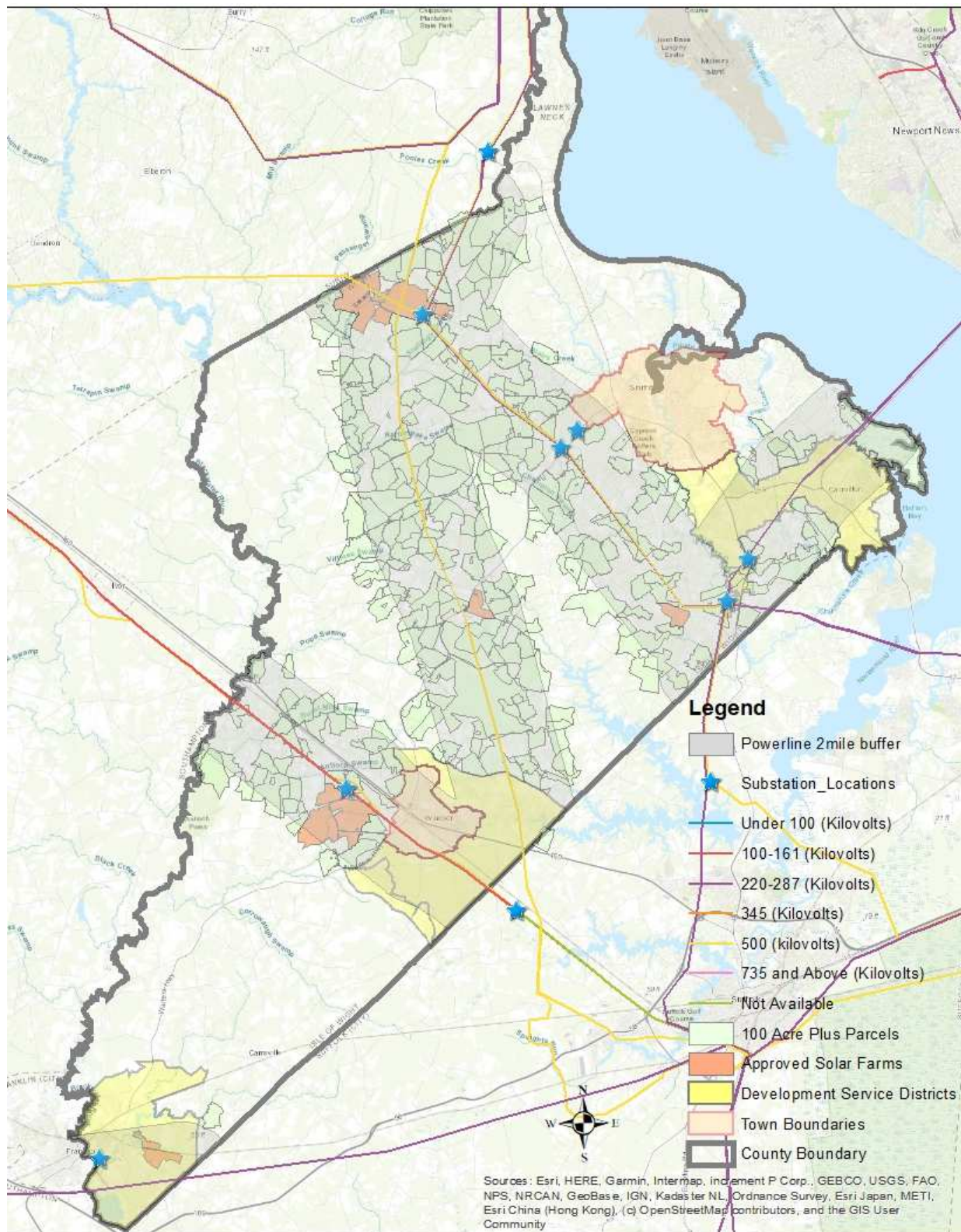
Industry representatives also state they usually begin their site selection process with parcels of at least 100 acres in size, noting that the negotiation and approval process is easier with fewer properties involved in the project. Staff began its analysis of potential sites using a minimum lot size of 100 acres, noting that property sizes involved in recent solar projects could be as small as one acre when used in conjunction with larger properties. Another rule of thumb for solar energy facility sites is that it takes approximately ten acres of solar panels to generate one megawatt of electricity.

With the assistance of County GIS staff, Herb Finch and Michael O’Shell, staff created a map of high probability areas based on the following factors:

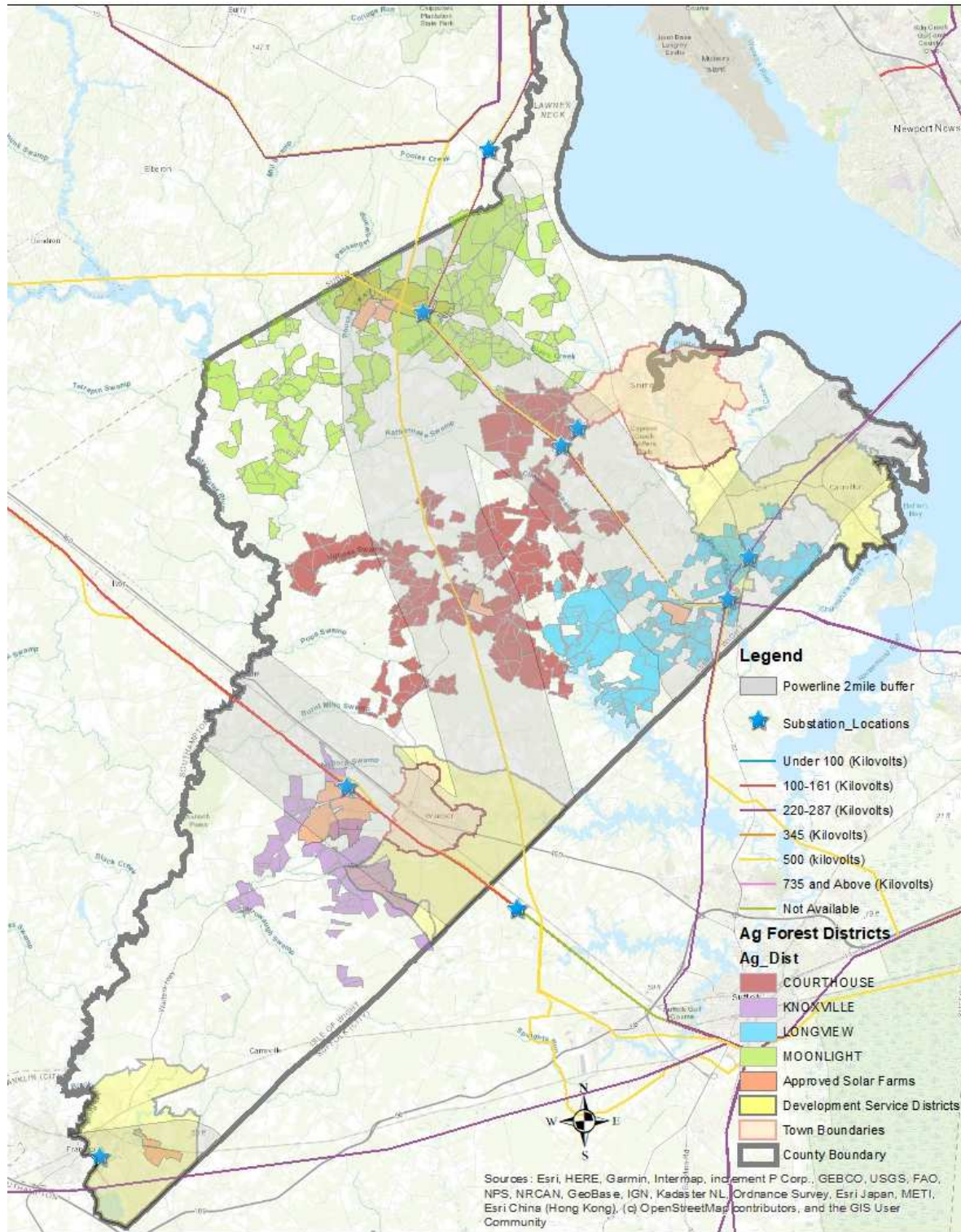
- Areas outside of the Development Service Districts (DSDs);
- Properties within 2 miles of a regional transmission line and substations;
- Properties with at least 100 acres; and
- Properties zoned Rural Agriculture Conservation.

Map 1 shows those areas with those properties within two miles of existing transmission lines and substations. When the location of existing and approved solar facilities are added to the map, they all fall within two miles of a transmission line.

There are a total of 314 parcels measuring at least 100 acres within the two mile zone for a total of 79,729 acres, or approximately 124 square miles. This represents about 39% of the total area within the County. These parcels include those currently under public ownership, under conservation easement, or otherwise constrained for future development.



When the location of the County's Agricultural and Forestal Districts (AFDs) is added as shown on Map 2, it is readily apparent that the high probability areas overlap with these districts. There are a total of 120 parcels that fall within two miles of transmission infrastructure that are also within one of the County's four AFDs. The total acreage impacted is 2,729 acres, or 5% of the total AFD acreage of 58,182 acres.



When looking at the total percentage of prime farmland soils in general in the County, the high probability area with two miles of the transmission infrastructure consists of 32,296 acres of prime farmland soils, prime farmland if drained, and soils of statewide importance out of a total of 79,279 acres within the buffer area on parcels of 100 acres or greater. In other words, 41% of the high probability area consists of these prime farm soil types. There is a total of 122,296 acres of prime farm soils within the County as whole. Prime farm soils within the high probability area represent about 26% of the total prime farm soils in the County.

Although the high probability map results appear to show a high percentage of land in the County capable of hosting a solar facility, there are other factors to consider as well. One of these factors is the maximum amount of additional load that transmission lines and substations can accept before exceeding their capacity. Before a solar facility can connect to an existing transmission line or substation, the developer must first file an interconnection request to PJM, which serves as the regional systems operator who then performs an impact study for the proposed connection on the supporting infrastructure. The size of the transmission line and substation will dictate the maximum amount of additional electrical supply it can accommodate.

Although the capacity size of the infrastructure will ultimately dictate the number of potential facilities on any one line or substation, there is always the possibility that utility companies such as Dominion Energy will choose to increase the size of their infrastructure to increase its capacity. The recently negotiated infrastructure bill, for example, includes \$73 million for upgraded and new transmission lines across the nation as of June 25, 2021. As solar panels become increasingly more efficient in their energy production, the more congestion they can add to existing transmission lines thereby increasing the need for upgraded infrastructure.

Future Action Discussion

As mentioned previously, the County has already incorporated utility scale solar facilities as a major utility in the CUP process with supplemental regulations to reduce potential detrimental impacts these facilities may have on surrounding properties and important viewsheds. In addition to the supplemental use regulations which apply to all such facilities, the Board has the ability to impose other conditions, if they feel that they are warranted to ensure compatibility with surrounding uses, such as operating hours, number of employees, restriction on traffic, noise, and the number of acres to be utilized. This may include, but is not limited to, such things as consideration that the proposed facility will not “result in a multiplicity or saturation of similar uses in the same general neighborhood of the proposed use.”

Although not specifically called out, the Board does have the right to deny an application, if they feel there is a saturation of similar uses in the area which is detrimental to the enjoyment of surrounding properties, protection of scenic, historic, or environmental features, or if it runs counter to the goals of the County’s plans and ordinances such as preserving agricultural uses.

The existing CUP process is critical to the County’s ability to assess an application on a case-by-case basis, because each application and associated properties will have their own unique

characteristics. The public hearings that are part of the CUP process allow future neighbors and community members to express their concerns and have the Board address them, if they feel it is warranted or feasible. Due to the typical large size of these projects with multiple potential impacts, staff does not advise making utility scale solar facilities a by-right, administrative process with no opportunity for public input.

In addition to the existing CUP requirement and supplemental regulations, the Board could consider additional criteria for how much of the County's rural areas can be utilized for future solar energy facilities. Below are a few recommendations from the County's Comprehensive Plan that are not already addressed in the existing Ordinance for the Board's consideration and discussion.

- Set a maximum percent usage of assembled property to mitigate impacts to habitat, soil erosion, and stormwater runoff;

The Board could place a limit on the total number of acres that can be developed with solar panels and associated equipment on the total acreage of any one facility. The advantage to this is to limit the potential size, and therefore the total potential impact, of any one facility on adjacent properties and resources as well as allow sufficient site area for such things as access roads, stormwater facilities and wildlife corridors. Culpepper County limits the total number of developed acreage to 300 acres for any one project. In general, development in the County is currently limited to a maximum site coverage of 60% rather than a total number acres.

- Avoid or minimize impact to prime farmland as defined by the USDA and Commonwealth of Virginia, respectively.

Considering the County has a total of 122,296 acres of prime farm soils, a statistically significant number of these soils could be considered 5% or over of this amount, or 6,145 acres or greater. Any acreage in excess of this number could be considered detrimental to the County's soil resources available for future farming and silvicultural uses. The Board could consider a policy recommending an upper target of 6,000 acres devoted to solar energy facilities to further its Comprehensive Plan goal to preserve the County's agricultural industry.

Another option the Board could consider would be to amend the Zoning Ordinance to prohibit solar facility development on the most significant soil types, such as "prime farmland soils."

- Limit the total number of acres in active agriculture that can be converted to solar energy facilities.

According to the 2017 Agricultural Survey, there are a total of 80,672 acres in active agriculture in the County. The Board could consider a policy of an upper target of 4,000 acres, or approximately 5% of total active farmland, that may be converted to solar energy facilities.

- Require facilities to be located adjacent or close to existing electric transmission lines;

The Board could consider amending the Zoning Ordinance to limit solar energy facilities to locations within two miles of any transmission line or substation. This would help to limit “solar sprawl” throughout the rest of the County.

If you wish to discuss this matter further or if you require additional information, please feel free to contact me.

cc: Randy Keaton, County Administrator

ISSUE:

Update of COVID-19 Response Efforts

BACKGROUND:

COVID-19 (coronavirus) cases are increasing throughout the region and efforts to vaccinate individuals are still ongoing. Staff will provide a brief update on local efforts.

BUDGETARY IMPACT:

None.

RECOMMENDATION:

For the Board's information.

ISSUE:

Discussion of American Rescue Plan Act Funding Options

BACKGROUND:

Isle of Wight County anticipates receiving significant federal funding (approximately \$7.2 million) from the American Rescue Plan Act of 2021 (ARP) to be used for infrastructure and other projects.

The statutory language of the American Rescue Plan Act outlines broad purposes for which the funds may be used:

- Responding to the public health emergency or its negative economic impacts
- Providing premium pay to eligible workers
- Providing government services to the extent of the reduction in revenues due to COVID–19 relative to revenues collected in the most recent full fiscal year prior to the public health emergency
- Making necessary investments in water, sewer, and broadband infrastructure

Staff has developed a budget outline as a starting point for the Board's discussion and consideration.

BUDGETARY IMPACT:

None.

RECOMMENDATION:

For the Board's information.

ATTACHMENTS:

Description	Type	Upload Date
ARP Draft Budget	Backup Material	7/30/2021

American Rescue Plan Act (ARP)

Allocations:

June, 2021	\$ 3,603,994
June, 2022	\$ 3,603,994
Total	\$ 7,207,988

Proposed Uses

Utility Projects:

Hardy Elementary water line	\$ 2,750,000
Hardy Elevated Tank	\$ 1,925,000

Broadband expansion	\$ 1,000,000
----------------------------	---------------------

Undesignated	\$ 1,532,988
Total	\$ 7,207,988

ISSUE:

Discussion of Holding a Strategic Planning Retreat

BACKGROUND:

During 2020, the Board held joint meetings with the School Board and with the Planning Commission to discuss important matters, but prior to COVID-19, its most recent annual planning retreat was held on September 30, 2019, at the Franklin Business Incubator building.

The Board may wish to discuss and consider holding a strategic planning retreat.

BUDGETARY IMPACT:

None.

RECOMMENDATION:

Per the Board's discussion.