Opportunity Zones and the Tax Cuts and Jobs Act

On December 15, 2017, a House of Representatives and Senate Conference Committee released a unified version of the Tax Cuts and Jobs Act (TJCA), and on December 22, 2017, the President signed the TJCA into law. One of the elements of the TJCA is the creation of Opportunity Zones throughout the U.S. For the purposes of the TJCA, Opportunity Zones are targeted toward economically-distressed communities where new investments, under certain conditions, may be eligible for preferential tax treatment. Specially-designated geographic areas qualify as Opportunity Zones if they have been nominated for that designation by the state and that nomination has been certified by the Secretary of the U.S. Treasury. A large portion of the Fresno State campus is located in a designated and certified Opportunity Zone (see attached map).

Opportunity Zone Funding for Venture Capital

Fresno State is prepared to investigate the feasibility of using the Opportunity Zone designation to create a venture capital fund to attract, develop, and grow new startup companies focused on advanced agricultural technology (Ag Tech) at the Claude Laval Water and Energy Technology Center (WET Center). With a particular focus on Ag Tech, Fresno State would apply the Opportunity Zone funding to establish the San Joaquin Valley as the global center for Ag Tech employment, manufacturing, production, and knowledge. The effort will be designated the San Joaquin Valley Ag Tech Regional Cluster Initiative.

As currently planned, the Opportunity Zone funding would expand the WET Center’s ability to attract, develop and grow new Ag Tech companies, which would in turn create enhanced research opportunities for faculty and students at Fresno State, and provide local career opportunities for Fresno State graduates. Then, when the new startup companies reach a certain level of maturity at the WET Center, the companies could then transition to the City of Fresno's Opportunity Zones to larger spaces to continue next-generation research and development, and full-scale manufacturing, production, marketing, sales, distribution and service. The proposed model would build upon the success of the WET Center to develop locally-grown Ag Tech companies that would provide economic opportunities for regional residents, and provide Ag Tech products and services all across the globe, and Fresno State would create a talent pipeline to meet the workforce requirements of the growing Ag Tech sector. A schematic of the funding concept is provided as an attachment.
Opportunity Zone Fund as Venture Capital Fund
Ag-Water-Energy-Environment Technologies
Fresno State WET Center

NOTE: Capital Gain tax liability can be deferred for private investors that invest their capital gain proceeds in a Qualified Opportunity Zone Fund.

Security sales by private investors resulting in capital gain tax liabilities

Capital Gain Income from Investors

NOTE: Capital Gain tax liabilities on the original investment in the qualified opportunity zone can be reduced in steps if the investment is held for defined periods of time (5 years, 7 years, and 10 years)

Capital Gain on Original Investment

Qualified Opportunity Zone Fund (managed by 3rd Party)

Investment Options

NOTE: A qualified opportunity zone fund means any investment vehicle which is organized as a corporation or a partnership for the purpose of investing in qualified opportunity zone property. The “property” can be in the form of stock, partnership interest, or real (tangible) property. For the initial startup of the OZ Fund as VC Fund at the Fresno State WET Center, investments will be limited to Stock Purchases and Partnership Interest, and not real property acquisition and improvement.

Fresno State WET Center Portfolio of Companies

Fresno State Faculty and Students Collaborate with WET Center companies on Ag Tech R&D

Fresno State produces graduates that fill the workforce talent needs of the Ag Tech sector

WET Center companies transition to City of Fresno OZ for nex-gen R&D, and full-scale production, sales, and distribution

NOTE: The WET Center will be the starting point for new companies developing Ag Tech, and when the companies reach predetermined maturity milestones, the companies will transition to the City of Fresno’s Opportunity Zone to further grow, develop and prosper, and continue to realize the benefits of Opportunity Zone funding. Fresno State will focus on producing graduates that meet all of the workforce talent needs of the Ag Tech companies launched from the WET Center.

New Startups Entering WET Center

Stock Purchase

WET Center Company #1

WET Center Company #2

WET Center Company #3

WET Center Company #4

WET Center Company #5

Service Payments to Fresno State WET Center

Mature Startups Exiting WET Center
San Joaquin Valley Ag Tech Regional Cluster Initiative

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Water and Energy Technology (WET) Center at Fresno State

The WET Center initiated operations in 2007 at Fresno State, and currently serves as a leader in the San Joaquin Valley in providing business incubation and acceleration services for startup companies developing advanced Ag Tech in water and energy. The leader of the WET Center is Ms. Helle Peterson who serves as the WET Center Director. Ms. Petersen, and her talented and creative team, are currently working with entrepreneurs from all over the world to research and develop advanced Ag Tech for water management, energy management, environmental protection, food safety, and overall farm operations that can be commercialized regionally, nationally, and globally – anywhere food is grown.

The WET Center at Fresno State is the ideal candidate to launch the San Joaquin Valley Ag Tech Regional Initiative to simultaneously (a) foster small businesses to innovate and develop commercially-viable Ag Tech, and (b) transform the economic fortunes of an economically-depressed, rural-dominated region by establishing the San Joaquin Valley as the global center for advanced Ag Tech employment, manufacturing, production, and knowledge. The WET Center’s leadership team envisions a future in which the San Joaquin Valley continues to lead the world in agricultural food production, and also leads the world in Ag Tech employment for the research, development, and commercialization of Ag Tech products and services that result in greater, more efficient food production, to serve a growing global population.

WET Center Record of Success at Fresno State

One of the keys to success for startup companies working with the WET Center over the years is the strategic efforts undertaken to seamlessly integrate public and private resources with the resources of the WET Center. A key resource for the WET Center is Fresno State. Fresno State contributes to creating a high-impact environment for business incubation and acceleration at the WET Center by providing entrepreneurs with access to published research faculty, exceptional student assistants, and expert professional staff from the Lyles College of Engineering; the Jordan College of Agricultural Science and Technology; the Craig School of Business; the Lyles Center for Innovation and Entrepreneurship; the Office of Community and Economic Development; the Center for Irrigation Technology; the California Water Institute, and the Irrigation Innovation Consortium. In addition to high-quality faculty, students and staff, Fresno State also provides business startups with access to the Fresno State Farm, which is one of the largest agriculture research farms in the nation at 1,000 acres and 28 business units. The Fresno State Farm provides a unique opportunity for entrepreneurs to research and test the efficacy and commercial viability of their respective innovations in a real-world, real-time farm operation.
As one measure of the WET Center’s recognized success, in 2016 the California Energy Commission (CEC) awarded the WET Center a $5 million grant to provide business incubation and acceleration services for startup companies to research, develop, and commercialize advanced technologies related to energy conservation and efficiency—particularly in the agriculture sector. The CEC resources have been invested to (a) double the number of companies receiving business incubation and acceleration services from the WET Center, and (b) launch Blue Tech Valley (BTV), a regional innovation cluster initiative led by the WET Center leadership team. The BTV cluster is focused on fostering innovation for the food-energy-water (FEW) nexus, and the cluster includes participation from CSU Bakersfield, Chico State, Humboldt State, Cal State Monterey Bay, Sacramento State, and the Sierra Small Business Development Center.

Currently, the WET Center team is working with XX companies, and from May 1, 2018 to July 30, 2018, the current cohort of WET Center companies raised $XXX million in private sector investment to further advance their product development and commercialization activities. Additionally, during the 2017-2018 school year, Fresno State faculty and students were involved in over $XXX million in research projects related to advanced agriculture technology for water management, energy management, environmental protection, food safety, and overall farm operations.

A Transformative Opportunity for Appalachia of the West

The State of California is the fifth largest economy on the planet, and agriculture represents approximately 17 percent of California’s total gross domestic product. At $46 billion in farm-receipt revenue in 2016-2017, California agriculture would rank at No. 64 on the Fortune 500 List of largest domestic businesses. However, while the state and national economies continue to improve, within the San Joaquin Valley the rate of economic improvement has been slow and not readily evident for a majority of the population. The San Joaquin Valley continues to suffer economically relative to the state and national economies in terms of median household income and unemployment. For example, the U.S. Census Bureau reports that for the City of Fresno the median household income (MHI) is $41,842; the state MHI is $63,783 (52% higher than Fresno); and the national MHI is $55,322 (32% higher than Fresno)—all in 2016 dollars. Further, while the national unemployment rate in June 2018 was reported at 4.0 percent, the unemployment rate in Fresno County was reported as 7.6 percent. These statistics are similar for all eight counties in the San Joaquin Valley, and it is these types of statistics that contribute to the socio-economic perception of the San Joaquin Valley as the Appalachia of the West.

For the foreseeable future, the San Joaquin Valley will remain a leader in global food production, and with a growing market-demand for advanced agricultural technology to support smart farming and precision agriculture, the opportunity exists to establish the San Joaquin Valley as the global...
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leader in Ag Tech products and services that can be manufactured and produced regionally by a trained, educated, and skilled workforce, and then commercialized and exported wherever food is grown nationally and globally. With the financial resources of a local venture capital fund within Fresno State’s Opportunity Zone, the WET Center will build upon its previous successes to mobilize, coordinate, and align public and private resources and investment to transform the San Joaquin Valley into a competitive, prosperous, and sustainable global center for Ag Tech employment, manufacturing, production, and knowledge.

The San Joaquin Valley as Global Ag Tech Center

The San Joaquin Valley is comprised of eight counties, and seven of the eight counties in the San Joaquin Valley are among the top ten most productive agriculture counties (by farm receipts) in the State.

The productivity statistics associated with California agriculture are impressive. For the most recently completed crop year of 2016-2017, the California Department of Agriculture reported that California farmers generated $46 billion in farm-receipt revenue for all agricultural commodities, which represents approximately 17 percent of California’s total gross domestic product. In addition to being the nation’s largest agricultural producer, California is also the largest exporter of agricultural products. In dollar terms, California’s agricultural exports reached $20.04 billion for 2016.

While the productivity statistics for California agriculture are impressive, and have been for decades, the continued financial success and long-term sustainability of agriculture will be directly related to the availability, reliability, and cost of water and energy to grow food in the future under constantly changing conditions. Food security, and the ability to grow and transport food reliably and sustainably under all conditions (flood or drought), has caused consumers and investors to focus inquiries on the resource (water and energy) demands of the food supply chain, and that has resulted in many food processors and retailers adopting "sustainable sourcing" policies, which are passed-through to farmers.

People cannot live without food and water, and with a growing national and global population, there is a need to continue researching, developing, and commercializing innovative Ag Tech products and services to optimize the use of water and energy in the food supply chain. There is a need to continue developing products and systems that allow farmers to grow more food per unit input of water and energy. Fortunately, California agriculture has been actively engaged in researching, developing, and commercializing Ag Tech for water and energy, and the WET Center has been a recognized a regional and national leader in these efforts. While consumer concerns
related to food security are one factor driving Ag Tech investment, another factor driving investment is that Ag Tech is good for business. Properly deployed, Ag Tech provides Farm Managers with real-time information and data on soil conditions, plant conditions, climate conditions, weed and pest infestation, and irrigation system performance and efficiency. Farm Managers then rely on this information to formulate farm-operations decisions including, but not limited to, agricultural inputs (water, herbicides, pesticides, fertilizers); food safety; equipment utilization; and labor management.

Ag Tech is a good business investment for agriculture to improve the financial performance of farm operations, and Ag Tech is good economic development investment to transform the socio-economic fortunes of the San Joaquin Valley.

San Joaquin Valley Ag Tech Regional Cluster Initiative

The WET Center’s San Joaquin Valley Ag Tech Regional Cluster Initiative proposal is designed to build upon the previous success of the WET Center in researching, developing and commercializing Ag Tech products and services, and to establish the San Joaquin Valley as the global center for Ag Tech employment, manufacturing, production, and knowledge.

The WET Center’s technical proposal for establishing the San Joaquin Valley as the global center for Ag Tech will be designed to (a) foster and promote Ag Tech as a viable and economically sustainable regional cluster initiative for the San Joaquin Valley; (b) coordinate and collaborate with regional public and private organizations to create a shared vision and action plan for establishing the San Joaquin Valley as the global center for Ag Tech; (c) attract, develop, mentor and train a socio-economically diverse contingent of entrepreneurs and innovators from throughout the San Joaquin Valley to commercialize high-impact, market-driven, commercially-viable Ag Tech products and services, (d) and maintain close relationships with food growers, processors, retailers, and other stakeholders to ensure that Ag Tech development activities remain aligned with market demands (current and future).

The WET Center currently enjoys regional prestige for state-of-the-market innovation, research, testing, and development for Ag Tech products and services, and the WET Center has successfully transformed this regional model into a statewide model with the Blue Tech Valley Regional Innovation Cluster for water, energy, environment and agriculture.

The WET Center’s technical proposal is to transform the economic fortunes of the San Joaquin Valley by embracing the area’s existing strength as a global food production region, and then combining that existing strength with other regional resources to establish the San Joaquin
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Valley as the global center for Ag Tech employment, manufacturing, production, and knowledge. The successful implementation of the San Joaquin Valley Ag Tech Regional Cluster Initiative will expand and enhance current research and development efforts in Ag Tech to drive product innovation; private sector investment; new business growth; workforce development; and increased income and wealth across the entire eight-county region.

Regional Economic Development Objectives and Expected Outcomes

The WET Center’s objective for the San Joaquin Valley Ag Tech Regional Cluster Initiative is to establish the San Joaquin Valley as the global center for Ag Tech employment, manufacturing, production and knowledge. The expected success of the San Joaquin Valley Ag Tech Regional Cluster Initiative is based on the premise that a cluster of socio-economically diverse business entrepreneurs and innovators in Ag Tech can serve as a catalyst to fuel a regional economic transformation that increases individual and family incomes and the overall wealth of the San Joaquin Valley.

The WET Center has developed the following objectives for the Ag Tech Regional Cluster Initiative.

a) To attract entrepreneurs and innovators from throughout the San Joaquin Valley, from all socio-economic backgrounds, to develop Ag Tech products and services;

b) To work closely with entrepreneurs and innovators to research, develop, test, and commercialize Ag Tech products and services for use regionally, nationally, and globally; and

c) To transform the economic fortunes of the eight-county region by establishing the San Joaquin Valley as the global center for Ag Tech employment, manufacturing, production, and knowledge.

The WET Center has defined the following expected outcomes for the San Joaquin Ag Tech Regional Cluster Initiative:

a) An increase in the number of early-stage business startups focused on Ag Tech;

b) An increase in the socio-economic diversity of Ag Tech entrepreneurs and innovators;

c) An increase in the number of counties participating in, and benefitting from, the growth of a regional Ag Tech sector;

d) An increase in the number of regional jobs created and sustained in the regional Ag Tech sector;
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e) An increase in the number of individuals trained and educated in secondary schools; community colleges; and universities to meet the growing demand for Ag Tech talent;

f) An increase in the median household income across the region; and

g) A decrease in the number of families reported to be living in poverty

Regional Economic Development and Job Creation Plan

The WET Center recognizes that every region of the country is faced with obstacles to high-impact and sustainable economic development. The eight counties that comprise the WET Center’s geographic boundary have historically faced high rates of unemployment and poverty, and a lack of education and workforce skill training. As a result, national and global companies rarely consider the San Joaquin Valley as a place to locate operations, manufacturing or production facilities. In fact, there are many companies in the San Joaquin Valley that have been forced to downsize or close operations due to financial hardship.

Because the WET Center has been actively leading the research, development, and commercialization of Ag Tech products and services in the San Joaquin Valley for over 10 years, investors in Fresno State’s Opportunity Zone should have a high degree of confidence that the proposed San Joaquin Valley Ag Tech Regional Cluster Initiative will be successful and sustainable. Located in the heart of the San Joaquin Valley, the most productive agricultural region on the planet with growers and food processors that are currently working with Fresno State to develop and implement advanced Ag Tech products and services, the WET Center’s proposal has all the elements required for long-term growth and sustainability. The high demand for Ag Tech by the local, national, and global marketplace; the Ag Tech research and development resources of Fresno State; the business incubation and acceleration services provided by the WET Center, effective partnerships with federal, state, and local government agencies; and the presence of active venture capitalists continuing to invest in new Ag Tech products and services, will all be contributing factors to establish the San Joaquin Valley as the global center for Ag Tech employment, manufacturing, production, and knowledge.

Workforce Development

In order for any economic development plan to be successful, there must be a corresponding investment in workforce development – private sector success is critically dependent on talent recruitment, development, and retention. Recognizing that workforce development is a critical success factor for the Ag Tech Regional Cluster Initiative, the WET Center proposes to work closely with all levels of education, including high schools, secondary schools, community
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colleges, and universities to engage in outreach efforts to promote the features, benefits, and advantages of pursuing a career in the Ag Tech sector in the San Joaquin Valley. In addition, the WET Center will continue to work with all of the Workforce Investment Boards serving each of the eight counties within the San Joaquin Valley to ensure that a high quality and sustainable talent pipeline is created to serve the Ag Tech sector.

Working with Fresno State research faculty, student interns, and professional staff, the WET Center is uniquely positioned to identify the technical requirements to create and develop a talent pipeline to serve entrepreneurs, innovators, and business startups that desire to research, develop, test, and commercialize advanced Ag Tech products and services in the San Joaquin Valley.

Communications, Coordination and Outreach

The WET Center’s proposal for the San Joaquin Valley Ag Tech Regional Cluster Initiative will require close communication, coordination, collaboration and outreach to create high-impact partnerships with prospective Ag Tech entrepreneurs and innovators; government agencies; private-sector collaborators and investors; academic institutions; regional and state economic development agencies; and workforce development and education agencies to create a talent pipeline for Ag Tech products and services.

For the San Joaquin Valley Ag Tech Regional Cluster Initiative, the WET Center proposes to enhance and expand its current coordination and collaboration efforts with public and private partners to recruit, develop and train small businesses to innovate Ag Tech products and services that are high-impact, market-driven, and commercially-viable. In addition, the WET Center will continue to partner with private agencies that represent the areas of law, finance, management leadership, marketing/sales, human resources, and international trade. Specifically, the WET Center will continue to provide technical assistance by offering business training, business counseling, mentoring for newly formed small businesses, providing technology transfer counseling, support for underserved communities and outreach efforts that link the actual with the virtual business incubators.

Technical Assistance for Entrepreneurs and Innovators

For over 10 years, the WET Center has been serving as a training center for entrepreneurs and innovators in Ag Tech products and services in the San Joaquin Valley. The WET Center’s mission is to recruit, mentor, and train entrepreneurs and innovators to create high-impact, market-driven, commercially-viable Ag Tech products and services. Training provided by the WET Center includes, but is not limited, to beginning, intermediate and advanced levels of
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business development to assist entrepreneurs and innovators with advancing their products and services from concept to commercialization.

The WET Center will have a keen focus on developing and growing the San Joaquin Valley Ag Tech Regional Cluster Initiative in a manner that fosters and promotes participation from entrepreneurs and innovators located in rural and disadvantaged communities and from diverse socio-economic backgrounds. Working with The Partnership and Blue Tech Valley, the WET Center can effectively provide much sought after training sessions to entrepreneurs and innovators located in rural and disadvantaged communities.

One barrier identified by the WET Center during the course of providing business incubation and acceleration services is training on the basics of business management and administration for new small business owners. While entrepreneurs and innovators possess exceptional skills and knowledge to research and develop new and advanced technologies, basic business management and administration skills may be lacking – and this is the knowledge gap that the WET Center can, and has been, filling for entrepreneurs and innovators. The WET Center assists new business owners by providing them with classroom training for the purpose of acquiring and refining skill sets required for owning, operating, and growing a business.

The WET Center services designed to support entrepreneurs and innovators includes, but is not limited to, the following:

- Business Readiness Review;
- Business Feasibility Assessment;
- Business Planning;
- Business Incubation and Acceleration;
- Business Management and Administration Mentoring;
- Technology Transfer Counseling;
- Commercialization of Existing Research and Development (R&D) Counseling;
- Export Readiness Counseling;
- Capital Investment Counseling;

The WET Center’s objective is provide prospective entrepreneurs and innovators with easy access to training and mentoring in all aspects of starting a new business in advanced Ag Tech. From product research and development, to demonstration and pilot testing, to soliciting investment capital, to basic business management and administration, the WET Center has been
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providing skill development training along the entire business startup continuum for individuals that desire to start a new business in Ag Tech.

The success of the WET Center model is based on coordinating the resources of government, academic, and private organizations to collaborate together to bring new technologies and new businesses to the market to transform the San Joaquin Valley into the global center for Ag Tech employment, production, manufacturing, and knowledge.