

Irrigation Outlook Not All Optimistic

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The potential for irrigation in Morrow county is tremendous. Many acres of fertile deep soil can be irrigated and can produce a wide variety of crops.

The potential yields of such crops as potatoes, alfalfa, dry beans, sugar beets, mint, corn, grass seed and many others are as good as areas where they are now being produced and in some cases, better. Many other crops are adapted to our climatic conditions and may have a place in the future of Morrow county agriculture.

The traditional crops of dryland wheat and barley are in a depressed market state due to over production and a lagging demand for pacific northwest wheat. As growers look to alternative crops for their farmlands they should remember irrigated agriculture is not all a bed of roses.

Many problems face the wheat producer who anticipates converting to irrigated crops requiring intensive management and labor. A concern of soil and water specialists from Oregon State University, who are working closely with early endeavor to irrigate former dryland wheat lands, is the low infiltration rate of our soils in this area. Many people have always felt that our soil would absorb unlimited amounts of water.

Research work, however, has indicated that the soils are quite limited in their ability to absorb high rates of water in a relatively short time. This factor may prove to be one of the biggest problems facing irrigated farms.

A second problem in applying water in this area is the age-old problem of wind. Uneven distribution of water

due to high and fluctuating winds cause uneven crop growth, which may be extremely important in some crops, and affects yields of all crops.

A third factor which affects all developing areas is establishing a reputation for producing a high quality, desirable, product which can find a favorable position in today's market place. Once a marketing channel is established for a new area it is much easier to expand production and compete with traditional production areas for that crop.

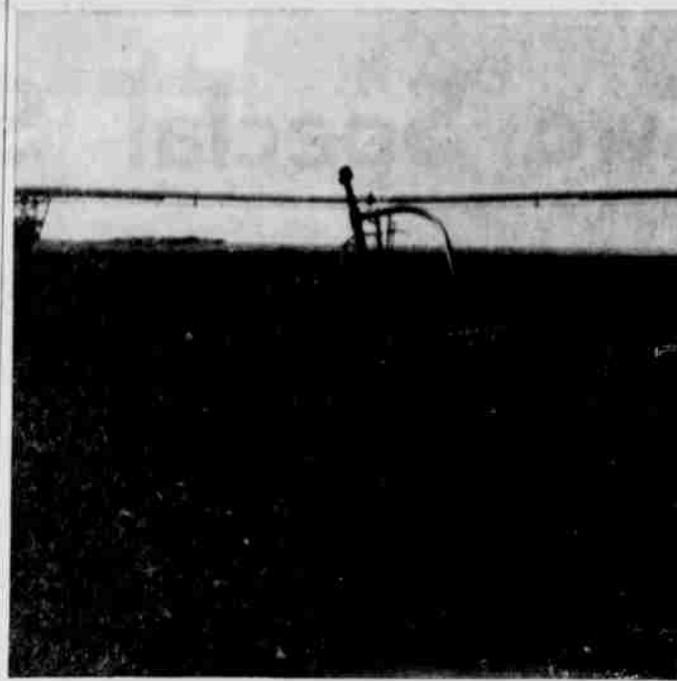
Future dependable sources of water for long range development provided at a favorable price is also a factor to consider.

Irrigation wells may be limited, thinking into the future, as a source of irrigation water as some concern has been expressed in what the future may hold for ground water as a source of irrigation water.

Thinking on the positive side, water development for irrigation in Morrow county is almost assured and the early pioneers are paving the way for what, in the future, promises to be a tremendous potential for food and fibre production for both man and livestock.

The production of livestock feed and the development of an expanding livestock economy for Morrow county may have more promise than many people realize.

Livestock and livestock feed production are closely tied to most high production areas of the world, and because Oregon ships a high percentage of their feeder cattle to other states. Feeding these cattle at home and exporting meat products rather than feeder cattle and surplus livestock feed seems a natural.



ANOTHER METHOD of easy-moving sprinklers is the tri-matic sprinkler, mounted on wheels but with trailing pipes. Four sprinkler heads are mounted on the trailing pipes, which slide along the ground when the section is moved. Two men can move the entire section, but it requires long lengths of pipeline to connect with the section.

(G-T Photo).

Save Manpower With Tractor Use In Moving of Irrigation Pipe

Gordon Geffe uses his tractor hitch to change location of five portable sprinkler lines in new orchard near Wapato, Washington.

He gets the job done in less than 40 minutes.

There's no manual lifting of any kind.

And there's no wading through mud.

That's because he is using the new dragline sprinkler system — continuous welded sections of 2-inch steel pipe, each 630 feet in length, with sprinkler heads spaced 30 feet apart.

When it's time to change location, Geffe merely backs his tractor to the end of the pipe, lowers the three-point hitch, operates a locking lever, then raises the hitch and drives through the orchard towing the long length of pipe behind him.

The pipe can't twist in transit because a metal flange holds it firmly in the locking lever on the tractor hitch. There's no problem skidding the pipe and risers by trees. Geffe didn't so much as graze a tree all last season, even though the last riser on the long pipeline is traveling more than 600 feet behind the tractor.

Geffe's 40 acres of two-year-old trees are five miles from his home place and are half of an 80-acre block of new land which he and John Douglas purchased, divided and developed.

Douglas also uses a dragline system. This permits the two men to irrigate the entire 80 acres as a single orchard, trade draglines back and forth at orchard boundaries to save distance in pipe moving.

"When I planned the orchard I knew I would put in a sprinkler system to get better water distribution and all the other benefits," said Geffe. "But when I investigated the dragline system, I found this would save me as much as two hours each time the sprinklers were moved—besides eliminating all the work of manually handling the pipe."

"There's also less capital outlay with the dragline, mostly because it eliminates fittings required with 30 and 40-foot lengths of portable pipe"

The Geffe, as well as the Douglas orchard, is supplied by a 15-horsepower electric pump pushing water through a central underground main. Lateral lines and risers are spaced 72 feet apart. Each riser serves four rows of trees through a portable 30-foot rubber hose connection to the dragline.

As Printed in Pacific Power & Light Company Farm NEWS

Safety Prompters

ALWAYS LOOK OVERHEAD WHEN YOU

- Handle Sprinkler Pipe
- Move Tall Equipment

Here are two important farm safety rules that are worth keeping posted in your hatband.

1. Never up-end sprinkler irrigation pipe under a power line. Aluminum pipe is a sure-fire conductor of electricity. Contact with a live wire is almost certain to result in serious electric shock.

2. Always call PP&L when extra tall equipment must be moved under a power line—we'll send a service man to help you. There is no charge for this service. It is part of our safety program. Safety is no accident.

It's wise to be careful with electricity.

As Printed in Pacific Power & Light Company FARM NEWS

Smokey Says:



THE BEST OF FRIENDS...



THE WORST OF ENEMIES!



Which one of these will it be?

Spring and Fall Pump Checklist

There's a right way and a wrong way to start and stop large electric pump installations. Taking a little time to go through a checklist in the proper sequence could help eliminate some of an electric motor's major enemies: Dust, stray oil, moisture, bearing friction, misalignment, vibration, uneven wear, overload, and excess heat.

Annual Startup

—Make sure main breaker of disconnect switch is open so control panel and motor is disconnected from all sources of electric power before any work is performed.

—Make sure all ground wires are intact and connected to ground rod and motor and switches are grounded and bonded together.

—Check motor starter panel and make sure all wire terminals and connections are tight. Inspect all contacts, both man and auxiliary, to see if they are free from burns or pits and are making good contact. Have badly damaged contacts replaced.

—Inspect fuse holder contacts, if provided, to see that the fuses are not loose which may cause excessive heating.

—Remove dust and other foreign matter from pump; motor, and switches.

—Wipe off the motor on regular inspections — and occasionally blow dust out of the wound section with fairly low pressure (not over 40 lbs. pressure) clean compressed air (free from grit, metal, or moisture).

—Inspect centrifugal pump housing for cracks or breaks, and make certain that all plugs and fittings are tight.

—Grease lubricated bearings should be flushed and repacked. Do not overlubricate. It will cause excessive friction.

—Be sure motor windings are dry and free from condensed moisture. If wet, dry air should be circulated through motor until thoroughly dry. Do not run motor until windings are dry.

—Drain oil reservoir and flush. Refill with manufacturer's recommended new oil. Check periodically during pumping season for any discoloration which will be an indication of possible trouble.

—Inspect interior and impeller of centrifugal pumps. If pump has been in service several years check impeller for excessive wear. This can drastically change pumping efficiency.

—Rotate pump and motor shaft by hand to make certain there is no binding or excessive friction prior to closing the electric circuits.

—After motor has started, check bearings for noise and unusual sounds. Have qualified maintenance person check and repair if needed.

Annual Shutdown

—Drain pump and pipe lines.

—Close entrances to pump and motor to keep out dust, rodents, and insects.

—Fill oil reservoir on pump completely to eliminate condensation.

—Lock disconnect switch to OFF position.

—Do not cover or surround motor with plastic, as this causes moisture to condense within motor. Use canvas or similar cover.

—During winter time have worn and noisy bearings replaced.

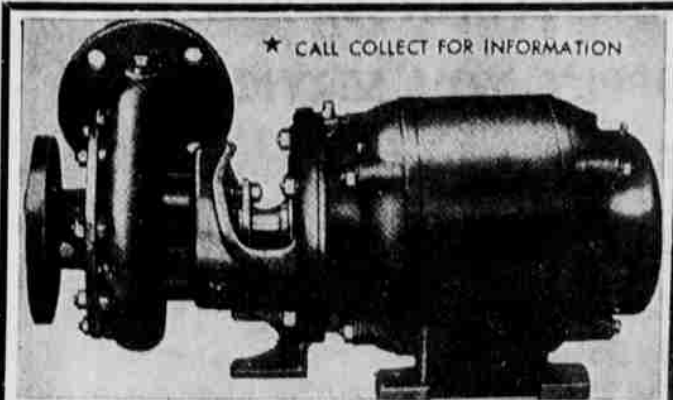
As Printed in Oregon Farmer

Israel Inventor of Drip Operation

A new method of "drip" irrigation has been developed in Israel which is said to be producing huge yield increases in arid areas. The method utilizes a system of plastic pipes which trickles a continuing small amount of water blended with fertilizer to the roots of plants. Surveys are reported to have shown that both the quality and quantity of vegetables and fruits produced have been

very appreciably increased, and substantial savings in water use made possible. The necessary equipment is expensive—reportedly \$400 per acre of fruit orchard and up to \$1,000 per acre of vegetables—but yields have been increased up to 100 per cent in the case of vegetables. Manufacturer of the equipment is Kibbutz Hatzetim, near Beersheba, Israel.

As Printed in Oregon Farmer



Headquarters For Complete Overhauling of Irrigation Pumps and Motors.

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